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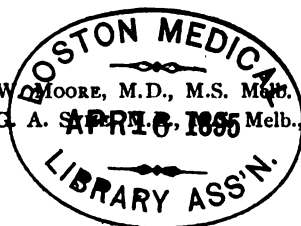
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EDITORS {

W. MOORE, M.D., M.S. Melb.

G. A. S. F.R.C.S. Eng.



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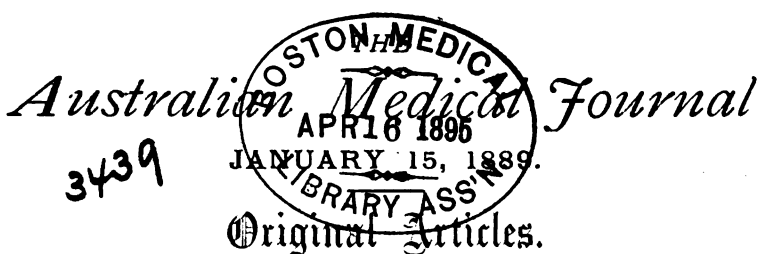
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SAILORS AND THEIR EYESIGHT.

By JAMES W. BARRETT, M.D., M.S., F.R.C.S. Eng.

Assistant Surgeon to the Victorian Eye and Ear Hospital.

At the Annual Meeting of the British Medical Association, held in August 1888, a paper of exceptional medical and public interest was submitted by Mr. Bickerton. In the light of the discussion which took place recently in this city, on the subject of colour blindness and defects of vision in those employed in the railway and marine services, the subject assumed such importance that I have ventured to give an epitome of his essay.

As far as I am aware, the author has for the first time placed on record an account of the accidents at sea which have resulted from the employment of sailors with defective vision. The following are the cases in which this cause of the accident seems to have been most clearly traced:—

“On the night of July 5, 1875, there was a collision near Norfolk, Va., between the steam tug *Lumberman* and the steamship *Isaac Bell*, the former vessel bound to, and the latter from Norfolk. The accident occurred at about 9 p.m. on an ordinarily clear night, under circumstances which until recently seemed more or less mysterious. The master of the steamer and all his officers made oath that at the time signals were made to the tug, the latter was from one to two points on the steamer's starboard bow, and consequently, the steamer's green light only was visible to the approaching vessel. Yet the master of the tug, whose statement was unsupported by any other testimony, asserted that the steamer's red light was exhibited, and he signalled accordingly. The discrepancy in the statements was so great, that many persons uncharitably charged the master of the tug with being intoxicated, although no evidence was ever offered in support of the charge. By this accident ten persons lost their lives. Upon a visual examination of this officer (under the rules) during the past summer, namely, four years after the accident happened, and during which time there had been no question as to his sight, by

the surgeon of the Marine Hospital at Norfolk, he was found to be colour blind, two examinations having been accorded him, with an interval of ten days between them."

The second case is as follows:—"The pilot of the steamer *City of Austria*, which was lost in the harbour of Fernandia, Florida, last April, is proved to be colour blind. In this way it would appear he mistook the buoys, and his mistake cost the owners 200,000 dollars (£40,000). An examination showed that, at a distance of more than six feet, he could not distinguish one colour from another. The physicians attribute the defect to an excessive use of tobacco. The services of the Marine Hospital surgeons were tendered to the local authorities without fee two years ago, but were declined."

In these two cases then, colour blindness was the cause of the accident, and it is most instructive to note that in the latter case the cause of the colour blindness was the excessive use of tobacco. Thus this individual might have entered the service after passing an examination for vision satisfactorily, and have acquired his colour blindness subsequently.

The next case related is of extraordinary interest, inasmuch as Mr. Bickerton attributes the loss of the *Vanguard* to defective eyesight (not necessarily defective colour vision), on the part of the look-out of the *Vanguard*. I cannot do better than quote the author:—"On September 1, 1875, four men-of-war (*Warrior*, *Hector*, *Vanguard*, and *Iron Duke*) weighed anchor at Kingstown Harbour for Cork. Shortly after sailing, the vessels ran into a bank of fog. Whilst in this fog the speed of the *Vanguard* was reduced, while that of the *Iron Duke* was maintained, and the not unnatural sequel of the one running into the other occurred, seventy minutes sufficing to send upwards of a quarter of a million of money to the bottom. The court-martial on the loss extended over nineteen days. The evidence was minute, and the court came to the conclusion that the loss of the ship was due to six causes, which, however, it is scarcely necessary to mention here. In addition, six officers were reprimanded, two of them being dismissed their ship. That four of these causes had practically nothing to do with the disaster will be seen by the fact that the Lords of the Admiralty, in commenting on these six said causes, cut them down to two, namely (a) to the reduction of speed of the *Vanguard*, and (b) to the sheering out of line and quitting station by H.M.S. *Iron Duke*. No one will question the

statement that, however much the *Iron Duke* had sheered out of line, the collision could not have occurred but for the reduction of speed on the part of the *Vanguard*. But the slowing of the *Vanguard* was not the initial cause of the accident. It was in itself but the effect of a cause, and we must inquire what it was that led to the slowing, for in that lies the real cause of the disaster. On that point, the evidence is very definite. We find that the slowing of the vessel was the direct consequence of a report by a 'look-out' man, that a ship was crossing the bows of the ironclad, and it was to avoid running this ship down that the captain gave the order to slow. And when we find that this 'look-out' man had defective vision; that in evidence he stated that his sight was 'not good on all occasions;' that he had 'on two or three occasions been treated for defective eyesight,' and that 'the sight of his left eye was a good deal stronger than that of his right.' When we find that of five 'look-out' men, placed equally well for seeing, this man alone saw the ship; and when again we find Mr. Hunt, First Lord of the Admiralty, stating from his seat in Parliament that 'indeed the vessel seemed to be the veritable Phantom Ship,' and again, 'from the evidence, there could be no such ship,' are we not justified in coming to the opinion that the ship ahead was indeed but a phantom of this 'look-out' man's disordered vision, and that in his defective vision lay the true cause of the accident?

"I fail to see how a case better proving the correctness of our contention, that defective eyesight in sailors is sufficient to, and frequently does, lead to accident, could be found. And, if further corroboration of this case is required, it may be found in the quotation from the Parliamentary report of a speech delivered on this disaster by Lord Brassey, which reads as follows:—'Was it not unsatisfactory that the men who were placed in the most responsible positions, such as look-out men and signal men, were only ordinary seamen? An ordinary seaman was stationed as look-out man at the top masthead of the *Vanguard*, who had been only eight months in a sea-going ship. The entire management and manœuvring of a ship by the officers in command might depend on the experience and judgment of the men on the look-out aloft, and if they were not efficient, the gravest consequences might ensue. The seaman placed as look-out on board the *Vanguard* was an ordinary seaman, and it was in consequence of his reporting a ship ahead that the *Vanguard* stopped and the

collision followed. It turned out *that this seaman had been twice treated for blindness in the right eye, which was the organ directed to the supposed ship.*'"

It is scarcely necessary to add, that this deficiency of vision on the part of the look-out man was much too trivial a condition to be taken into consideration either by those who formed the court or by the Lords of the Admiralty. It was sufficient and necessary for them to find a cause, and I can quite understand their being influenced by some such feeling as that six causes ought to be sufficient, without troubling to find a seventh; and that in reprimanding six officers and dismissing two of them their ship, they had done their duty. The official account of the court-martial does not say how they rewarded the defective-sighted look-out man; for all we are aware he is still on the look-out for some more phantom ships, and I have very little doubt but that when found he will do his best to make use of them.

The author further points out that, although an officer must pass some sort of an examination of his vision, a sailor is exempt. It would seem too absurd to point out the following facts again, were it not that the authorities to this day apparently do not realise that they are facts:—(1) That at the entrance examination of vision it is absolutely necessary to test the colour sense at the actual or proportionately reduced distances at which the examinee must distinguish colours when at business. (2) That colour blindness may be developed in those who have passed such examination satisfactorily, after the examinee has entered the service—as from the excessive use of tobacco. (3) That diseases of the eye may develop after entrance into the service, even without the sufferer being conscious of their existence in the first instance.

One can only endorse the conclusions of Dr. Grossman, recorded at the same meeting, viz. :—(1) In all schools (boys' schools at least) an examination for colour blindness ought to take place at a certain time, say for instance, at the age of ten. (2) Every railway servant and sailor ought to be examined when entering the service. (3) These latter examinations ought to be repeated both periodically and after special occasions, and I would add that at each of these examinations, the vision should be accurately and methodically tested.

NOTES OF A CASE OF DIAPHRAGMATIC HERNIA.

By JAS. M. PARDEY, M.B., B.S.

G. L., male, aged 7 years, was first ill in July 1885. Was then feverish, the temperature ranging between 101° and 103° F. Had vomiting for from seven to ten days; then developed tenderness and slight abdominal distension with diarrhœa. The diarrhœa ceased in ten days, but the other symptoms continued till the beginning of September 1885, with muttering delirium and pain, most marked in right iliac fossa. The evacuations were loose and light-coloured. The temperature gradually fell to the normal point, and he then became convalescent.

Since then he has had good health, beyond at times complaining of slight epigastric and back pains, with "startings" at night.

On November 7th, 1888, at 1 a.m., he was found vomiting; vomit greenish, not stercoraceous; bowels open; fæces hard and small, no pain. Was given a mixture of soda and bismuth, and an enema. During the day the vomiting continued, and everything was rejected. Bowels open twice during the day; fæces still hard and lumpy. At 8 p.m. the vomiting was less frequent; vomit still greenish.

On examination of abdomen, there was found, on the morning of the 7th inst., slight distension, with fulness, in right hypochondrium; very tympanitic in left hypochondrium and epigastrium, also over left side of thorax. These signs became more marked in the evening. The rectum was found, on digital examination, to be empty and flaccid, and no sense of fulness or obstruction.

A consultation was held between Drs. Maddox and Hallows, and it was agreed, that an obstruction existed near the pylorus in the duodenum. The patient was now collapsed; pulse very weak, about 100. On account of his condition, it was not thought advisable to undertake any operative measures.

At 3 a.m. on November 8th, he had an attack of vomiting, and evacuated a large quantity of very foul matter, and then died.

Post-mortem examination made 8 p.m. on November 9th, 1888. Only abdomen and thorax were examined. In the abdomen were found remains of old peritonitis, in the form of bands and adhesions between the different coils of intestines, and between the intestines and abdominal walls; intestines deeply congested, small intestines collapsed, distension of descending colon for 4 inches below the hernia of the splenic flexure of the colon. The stomach and splenic flexure of the colon (to the extent of

about 5 inches,) had passed through an opening in the diaphragm, to the left of the midline, into the left pleural cavity. The opening was about $3\frac{1}{2}$ inches in circumference, and its edges were smooth and rounded. The stomach was greatly distended and congested, and was twisted on itself, so that the lesser curvature was directed downwards. The ring through which the hernia had passed did not grip the hernia tightly. Heart small and pushed to right of the midline, contracted in all its cavities. Left lung shrunk and airless, and lying on the sides of the bodies of the vertebræ. Right lung hypertrophied.

Remarks.—Judging from the condition of the left lung, it being perfectly airless and collapsed, and situated at the sides of the bodies of dorsal vertebræ, the hernia must have existed for some considerable time, probably from birth, the opening in the diaphragm being due to some congenital deficiency in that muscle. There had never been any dyspnœa or gastric trouble, (beyond slight pains), and the boy was able to play and run about as other children do. This case shows how one lung will take on compensatory hypertrophy and perform the functions of the two, as the left lung was useless for respiratory purposes. It also shows that the heart can easily accommodate itself to an altered position.

The remains of old peritonitis were no doubt due to the attack of illness in 1885. The boy was supposed to have eaten largely of raisins before the last attack of illness. The vomit was evidently caused by the twisting of the stomach itself.

For the notes of the illness, I am indebted to Dr. Hallows, for whom I performed the post mortem examination.

Medical Society of Victoria.

ANNUAL MEETING.

WEDNESDAY, JANUARY 2ND, 1889.

(Hall of the Society, 8 p.m.)

Present: Dr. J. P. Ryan (in the chair), Drs. Allen, E. W. Anderson, A. V. M. Anderson, Bage, Balls-Headley, Barker, Barrett, Bennie, Bird, Bowen, Brett, Fitzgerald, Courtenay, Fletcher, West Ford, Haig, Hinchcliffe, Howard, Jackson, Joyce, Jonasson, Le Fevre, Maudsley, Miller, Neild, Reid, C. S. Ryan, and Webb.

Dr. Kirtikar, of Bombay, was present as a visitor, as also was Dr. Verco, of Adelaide.

The minutes of the November and December meetings were read and confirmed.

ELECTION OF NEW MEMBERS.

The following were elected Members of the Society:—Adam Richard Stackpoole, L. et L. M.R.C.P. et L.R.C.S. Ed., of Hawthorn, proposed by Dr. Stirling, seconded by Dr. J. P. Ryan; Edward John McCardell, M.D. C.M. (Queen's Univ., Kingston, Canada), M.R.C.S. Eng., of Prahran, proposed by Dr. Barrett, seconded by Dr. J. P. Ryan.

Three gentlemen were nominated as Members of the Society.

The HON. SECRETARY then read the Annual Report of the Committee for the past year:—

ANNUAL REPORT OF THE COMMITTEE.

The Committee, in presenting their Annual Report, have great pleasure in congratulating the members of the Society on the progress made in every direction during the past year.

During the year, twenty-six (26) ordinary members have been elected, two ordinary members have become life members, and one corresponding member has become a life member. The names of two members have been removed from the list for non-payment of subscriptions, two members have resigned, and one has died. There are, therefore, now 235 members on the roll, including 19 life members, 199 ordinary members, 8 corresponding members, and 9 honorary members. The number of members in past years is shown by the following table:—

1854	..	18	1871	..	80	1877	..	136	1883	..	174
1864	..	49	1872	..	87	1878	..	141	1884	..	177
1865	..	45	1873	..	107	1879	..	158	1885	..	187
1867	..	41	1874	..	117	1880	..	167	1886	..	205
1868	..	57	1875	..	123	1881	..	181	1887	..	213
1869	..	66	1876	..	133	1882	..	179	1888	..	235
1870	...	65									

The progress of the society with respect to number of members has therefore been excellent. During no previous year throughout the whole history of this—one of the oldest Medical Societies in existence—has there been such an increase in the number of members, viz., 26.

With regard to the scientific business transacted, there have been eleven meetings for the despatch of such business, at which

the average attendance of members has been 24, the maximum attendance being 37, the minimum 18.

At these meetings, the following business has been transacted :
Papers have been read by—

Dr. Neild, "On the Immunity of the Insane from Physical Pain in Organic Diseases and Injuries, which in the Sane are accompanied by much Bodily Suffering."

Dr. F. T. West Ford, "Notes of a Case of Diabetes, illustrative of a new mode of treatment."

Drs. Bowen and Barrett, "Report on the Condition of the Eyes of a Patient," exhibited by Dr. Grant.

Dr. F. D. Bird, "Notes of a Case of Strangulated Hernia."

Dr. A. Mueller, "The Action of Snake Poison, and the Use of Strychnia as an Antidote."

Dr. Honman, "A fatal Case of Camphor Poisoning."

Dr. Balls-Headley, "Antiseptic Midwifery."

Dr. Syme, "Notes of a Case of Loose Body in the Elbow Joint."

Dr. Joyce, "A Case of Strangulated Hernia."

Dr. F. D. Bird, "Notes of a Case of Wound into the Knee Joint."

Dr. W. A. Wood, "The History of an Hydatid."

Mr. J. W. Dunbar Hooper, "Uterine Irrigation."

For Dr. Murray-Gibbes, "The Treatment of Diphtheria."

Dr. Stirling, "Notes of a Case of Profuse Hæmorrhage from the Lungs, treated by the Hypodermic Injection of Atropine."

Dr. Lillies, "Notes of a Case of Foreign Body in the Left Bronchus."

Dr. Balls-Headley, "A Second Series of Seven Cases of Laparotomy."

Dr. Barrett, "A Complicated Iridectomy."

Cases have been exhibited by—

Dr. Grant (Hysterical Hemi-anæsthesia and Hemi-paresis, Spinal Myosis).

Dr. Syme (Localised Dermatitis of the Back of the Hand.)

Dr. McLean (Ectopion Vesicæ).

Dr. Syme (Disease of the Breast, Epithelioma of the Upper Lip and Leukoplakia of the Tongue and Mouth.)

Dr. F. D. Bird (Wound into the Knee-joint).

Dr. Moloney (Exophthalmic Goitre).

Dr. Stirling (Hypertrophy of the Second and Third Toes of the Left Foot).

Apparatus has been exhibited by—

Dr. Astles (Bergeon's Apparatus for the Administration of Gaseous Enemata).

Dr. Barrett (Artificial Larynx, Allen's Surgical Pump, The Bamber Portable Commode Bed).

The following Pathological Exhibits have been submitted by—

Dr. J. W. Barrett (An Eye in a state of Panophthalmitis).

Dr. Joske (A Uterus taken from a Woman whilst Menstruating).

Dr. Syme (Spinal Curvature, Strumous Kidney).

Dr. Maudsley (Cancer of the Pylorus, Ulcer of the Pylorus, Kidney Disease Secondary to Disease of the Lower Urinary Tract, Primary Cancer of the Liver, Cancer of the Pancreas, Caseating Lobar Pneumonia, Melanotic Sarcoma, General Tuberculosis, Complications in Typhoid Fever, Thrombosis in Veins following Rheumatic Fever, and other specimens).

Dr. Grant (Preputial Calculus, Renal Mulberry Calculus, Drawings, Casts, and Chalk Stones from a case of Gouty Deposit).

Microscopical Exhibits—

Dr. J. W. Barrett (Melanotic Sarcoma of the Choroid, Epithelioma of the Ocular Conjunctiva, Myxo-fibroma of the Cornea, Rodent Ulcer of the Eyelid, Melanotic Tumour of the Eyelid, Pigment Deposit in the Conjunctiva).

Dr. Syme (Loose Body in Elbow Joint, Epithelioma, Leukoplakia).

Dr. Maudsley (several Pathological Specimens).

Four special meetings have been held throughout the year. At these meetings the rules have been altered to permit of the appointment of two Editors to the *Australian Medical Journal*; to permit of the increase of the number of members of Committee from six to ten; to permit of the participation in the Annual Election of the Office-bearers by Country Members who may now vote without being present at the Annual Meeting; and to

authorise the Committee to make a levy of 10s. 6d. on each Member of the Society, in order to effect repairs of the hall of the Society, for which there was urgent necessity.

The last special meeting held during the year was of unusual interest. The evil of unqualified practice has grown to a great extent in Melbourne of late, owing to the inoperative condition of the law. The Committee of the Society invited the Council of the Victorian Branch of the British Medical Association to meet with it, and to hear from Dr. Youl, the President of the Medical Board, a statement of the amount of irregular practice in existence. After hearing his statement, the Committees felt that the matter should be made public in order that people might be made alive to the necessity of protecting themselves. A joint meeting of the two Societies was called, and was largely attended, about seventy-five members being present. At this meeting it was decided that further legislation to protect the public against unqualified practitioners was required, and the Committees of the two Societies were requested to draft a new Medical Bill, and to report to a further meeting of the two Societies as soon as possible. This drafting is nearly completed, and the New Bill will be submitted to the Members of the two Societies shortly. It may be said of the Bill that its chief object is so to arrange matters that the public may distinguish between qualified and unqualified practitioners.

The Committee regret that during the year the Society lost by death one of its oldest and most valued members, Dr. W. H. Campbell; and that illness, which fortunately has terminated favourably, has prevented the late President, Dr. J. Williams, from attending the later meetings.

The Committee has met 16 times; 13 times to transact the ordinary business of the Society, and three times in conjunction with the Council of the Victorian Branch of the British Medical Association. The attendance of Members has been as follows:—Dr. J. P. Ryan 14. Dr. Balls-Headley 7, Professor Allen 4, Dr. Barrett 15, Dr. Bowen 3, Dr. Webb 9, Dr. Hinchcliffe 1, Dr. Jackson 2, Dr. Jamieson 9, Dr. Neild 16, Dr. Snowball 5, Dr. Williams 3 (absent through illness), Dr. Moore 8, Dr. Syme 10, Dr. Graham 4, Dr. Cutts 1 (absent in Europe)

At the beginning of the year the Committee elected Dr. Moore and Dr. Syme Joint Editors of the *Australian Medical Journal*. The excellent manner in which they have maintained the

reputation of the oldest monthly Journal in Victoria is well known to its readers.

The Library has received constant attention from the Librarian, Dr. Webb, who has worked, if possible, harder than ever at his task. In his efforts to provide Members with a first-class library, he is sadly hampered by want of funds. It is clearly impossible that such a library as that of the Medico-Chirurgical Society of London can ever be established even in miniature with us, unless some arrangement is made to provide a certain annual sum to cover the expenses of its conduct.

The attention of the Committee has been directed at times to ethical questions, members asking it to adjudicate in cases of dispute. The feeling of the Committee has been that such questions depend for their settlement altogether on the good taste and feeling of the persons most interested, and it has consequently refrained from doing more than indicate the usual customs followed by medical men under the circumstances complained of.

The near approach of the Intercolonial Medical Congress has undoubtedly affected the Society, and has, to some extent, diminished the interest taken in its proceedings latterly. Yet a reference to the list of scientific work done during the year shows that it has been great, a matter of congratulation to members.

The Committee has under its serious consideration the advisability of recommending an increase of the annual subscription. At present, the income of the Society is merely sufficient to meet current expenses. Consequently, if repairs to the Society's property are needed, no funds are available. At present, too, the expenditure on the library is nearly nil. In fact, the Librarian finds himself constantly hampered in his efforts for want of ridiculously small sums. The levy made recently has enabled the Committee to place the Hall and property of the Society in a safe and satisfactory condition.

The Report was adopted on the motion of Drs. Jonasson and Jackson.

The Annual Report of the Hon. Treasurer was then read :—

REPORT OF THE HON. TREASURER.

MR. PRESIDENT AND GENTLEMEN,—I have much pleasure in presenting the following statement of accounts for the past year,

and also a table showing the indebtedness of the Society to its Debenture holders.

*The Treasurer in account with the Medical Society of Victoria,
for the year ending 31st December, 1888.*

<i>Dr.</i>				£	s.	d.
To Balance from 1887	..	..	..	46	4	5
„ Subscriptions and Entrance Fees	..	..	..	225	14	0
„ Levy for Repairs to Hall	..	..	..	45	0	0
				£316	18	5
<i>Cr.</i>				£	s.	d.
By Purchase Debentures late Dr. Wilkie	..	..	..	25	0	0
„ Interest on Debentures	..	..	..	19	10	0
„ Mr. Cackett, Caretaker	..	..	..	10	6	0
„ Detmold	..	..	..	11	0	0
„ Stillwell	..	..	..	48	18	6
„ Dr. Allen (expenses paid)	..	..	..	2	10	0
„ Dr. Webb	..	..	..	10	8	6
„ Dr. Barrett	..	..	..	3	6	6
„ Rates	..	..	..	5	15	0
„ Gas	..	..	..	1	11	7
„ Mayer and Meltzer	..	..	..	2	8	6
„ Clausen	..	..	..	1	19	9
„ Heath	..	..	..	1	10	0
„ Bank Book	..	..	..	0	8	8
„ Dr. W. Barker, Debenture Interest	..	..	..	0	12	0
				145	5	0
Balance in Bank	..	..	..	171	13	5
				£316	18	5

Audited and found correct.

AUBREY BOWEN,
Treasurer.
December 28, 1888.

WM. BARKER,
P. B. BENNIE, } *Auditors.*

DEBENTURES STILL OWING.

MEMBERS.

Dr. Headley	..	..	10	Dr. McMillan	..	..	5
„ McGillivray	..	..	10	„ James	..	..	4
„ Cutts	..	..	5	„ Rudall	..	..	2
„ Bowen	..	..	5	„ Barker	..	..	2
„ FitzGerald	..	..	5	„ J. P. Ryan	..	..	2
„ Lawrence	..	..	5	„ Ford	..	..	2
„ Embling	..	..	5	„ Le Fevre	..	..	1
„ Girdlestone	..	..	5				
„ Gray	..	..	5				73

NON-MEMBERS.

Medical Benevolent Society	..	12	Dr. P. Smith	..	..	2
Dr. Fulton	..	4				
						18

DEBENTURES RETURNED TO SOCIETY.

LIFE MEMBERS, 5 DEBENTURES EACH.

Dr. F. D. Bird	Dr. Hewlett	Dr. Fetherston	Dr. Barrett
" S. D. Bird	" Neild	" Moloney	" Fletcher
" Webb	" FitzGerald	" Cutts	" Graham
" Burke	" Bowen	" Lawrence	" Morton
" W. Thomas (4)	" McInerney (pur.)	Penfold (country member, pur.)	
Dr. Day (the late) purchased ..	5	Dr. Molloy (presented) ..	2
" Blair ..	5	" Rowan ..	2
" Paley (the late) ..	5	" Ralph ..	1
" Whitcombe ..	5		

You will see by the above that the only additions to our Life Member List during the year have been Dr. McInerney, who has purchased his membership; Dr. Thomas who has surrendered his four Debentures for the same purpose, and Dr. Penfold, who has initiated the purchase of a Country Membership.

The Society is still £475 in debt, but I have great hopes that this will be much reduced before the next annual meeting. A large number of subscriptions are still due for 1887 and 1888, and even some entrance fees. I have sent various reminders, but suppose in the press of other business they have been laid aside and forgotten; however, it is not too late to pay, and I fully expect to receive a large number of them when this report is read. The Society has made a levy on Members for the necessary repairs to the Hall, and as you see, this has been fairly responded to.

I must again urge upon the Members as a body to assist as much as possible in reducing the debt on the Hall. There is no doubt, in our present flourishing condition, if free from all liabilities, we should be in a position to enable our indefatigable Librarian to raise the already useful collection of books into a Library of reference of incalculable value to the Members.

The Honorary Treasurer's Report was adopted on the motion of Dr. C. S. Ryan and Dr. Courtenay.

The Hon. Treasurer announced that Dr. J. P. Ryan had just presented his two debentures to the Society.

The HON. SECRETARY then read the Report of the Hon. Librarian, Dr. WEBB, for the past year:—

REPORT OF THE HON. LIBRARIAN.

I am happy to be able to congratulate the Society on the substantial improvement the Committee has been able to effect in the department entrusted to my care. In the early part of the

year, a subscription was set on foot for the purpose of completing the furniture of our Hall, and allowing the old unsightly book-cases being replaced by others more in keeping with the rest of the furniture. The subscription resulted in a sum of £48 14s. 6d. being collected; the money spent amounted to £75, leaving a deficit of £27 5s. 6d. Nearly all the English Medical and Surgical Journals are now complete, and a few of the leading American, with the exception of a few early numbers of the *Medical Press and Circular*, and some portion of the *British Medical Journal*. The references to Neale's Digest are perfect.

I have to thankfully acknowledge donations from Baron von Müller, the Government Statist, Drs. Jamieson and Woinarski.

DONATIONS TO THE LIBRARY FUND.

Dr. Power	£1 1 0	Dr. Ryan, J. P.	£2 2 0
„ Neild	2 2 0	„ Duigan	1 1 0
„ Barrett	1 1 0	„ Duret	2 2 0
„ Cutts, Junr.	1 1 0	„ Walsh	1 1 0
„ Moore	1 1 0	„ Reid	1 1 0
„ Davenport	2 2 0	„ Girdlestone	2 2 0
„ Webb	2 2 0	„ Finlay	1 1 0
„ Burke	1 1 0	„ Sullivan	1 1 0
„ Smith, Chas.	1 1 0	„ FitzGerald	2 2 0
„ Gray	1 0 0	„ Bowen	1 1 0
„ Schiel	0 10 6	„ Meyer	1 1 0
„ Peipers	1 1 0	„ Headley	1 1 0
„ Syme	1 1 0	„ Snowball	2 0 0
„ Morrison	1 1 0	„ Adam	1 1 0
„ Burton	1 0 0	„ Wood	1 1 0
„ Le Fevre	3 3 0	„ Courtenay	1 1 0
„ Haig	1 1 0	„ Astles	1 1 0
„ Jackson	3 3 0		

The Report of the Hon. Librarian was adopted on the motion of Drs. Neild and Le Fevre, both of whom referred in warm terms to the energy and zeal displayed by Dr. Webb in his efforts to improve the Library, and urged members to use every endeavour to supplement the Library Fund.

ELECTION OF OFFICE-BEARERS OF THE SOCIETY FOR 1889.

The Annual election of office-bearers then took place, with the following result:—

President — Dr. Balls-Headley; Vice-Presidents — Professor Allen, Dr. Hinchcliff; Honorary Treasurer — Dr. Bowen; Honorary Librarian — Dr. Webb; Honorary Secretary — Dr. J. W. Barrett; Members of Committee — Drs. F. D. Bird, Grant, Girdlestone, Jamieson, Le Fevre, Neild, C. S. Ryan, J. P. Ryan, Snowball, and Williams; Auditors — Drs. Barker and Bennie.

Drs. Bennie and Courtenay acted as scrutineers.

The President, Secretary, Treasurer, Librarian, and Auditors were returned unopposed.

This was the first election in which country members took part. Forty-seven ballot papers were forwarded to country members; 14 returned them, and consequently voted.

INDUCTION OF THE PRESIDENT-ELECT FOR 1889.

Dr. J. P. Ryan, the retiring President, then introduced Dr. Balls-Headley, the President-elect, to the members present.

Dr. J. P. Ryan then read the following address:—

PRESIDENT'S ADDRESS.

GENTLEMEN,—I shall always look back with pride, as well as with pleasure, to the year which has just terminated, and during which I have had the honour of occupying the Presidential chair of the Medical Society of Victoria. The duties and responsibilities of my position were rendered comparatively light and easily borne, by reason of the valuable co-operation which I received, not only from my associates in office, but also from the members who assisted at the meetings which were held throughout the year. At the start, I was deprived of the advice and assistance of Professor Allen, our indefatigable Secretary for so many years, but I am glad to say, that in his successor, Dr. J. W. Barrett, we have an able and worthy substitute. The Society has made satisfactory progress during the year. We have lost three members, two by resignation, one by death. I allude to the late Dr. W. H. Campbell, whose kind face, though not often seen amongst us in recent times, was well and familiarly known in the earlier days of the Society.

On the other hand, we have added twenty-six new names to the roll of our members—the largest increase which has ever taken place in any single year, and that roll now shows the goodly number of 235 members. We have held, including the present one, twelve ordinary and four special meetings throughout the year, at which the attendance was exceptionally good, the average number of members present at each meeting, excluding this one, being twenty-four. A series of interesting papers were read and discussed, and a very large number of pathological, microscopical, and other specimens were shown. The number of members of Committee has been increased from six to ten, thus allowing a larger proportion of our members to become office-bearers; and

the privilege of voting, in their absence, by ballot papers in the election of office-bearers at the annual meetings, has been granted to members of the Society residing more than ten miles out of town. I trust this concession will induce country members to take a more active part in the business of the Society than they have hitherto done.

A joint meeting of this Society and of the Victorian Branch of the British Medical Association, was held in this Society's Hall in November, to discuss the question of quackery and irregular practice in Melbourne. I must confess that, personally, I felt disinclined for a long time to join in any attempt to interfere in the matter. I held that it was mainly the public's concern, not our's; and that the public should look after themselves. Within the last few months, however, the army of irregular practitioners here has been increased by so many recruits from the other colonies, who openly engage in the practice of a profession of which the vast majority of them are entirely ignorant, that it was felt by many of us that some steps should be taken to stem the evil. If the public had only suffered through their pockets, it would have mattered little, and they might learn wisdom in time; but every day they are being damaged by the gross malpractices of many of these men, who undertake the treatment of diseases of such delicate organs as the eye and ear, without even a knowledge of their anatomy, and where a slight mistake in the treatment may be followed by such serious consequences to the sufferer. The general feeling of the meeting was in favour of some fresh legislation on the subject, and the Councils of the two Societies are engaged in drafting a bill on the lines of the Medical Practitioners' Act 1865, which, if carried through Parliament, will give the reconstructed Medical Board power to deal with those who are fraudulently engaged in the practice of Medicine. It is a mistake to suppose that any such action, as the prosecution of offenders against the law, should be undertaken by medical societies. Those societies are not medical protection associations, nor are they—shall I say it?—trade unions. Their work is in another sphere, their object and end the advancement of medical science; and, need I remind you, that every step in advance, which is slowly and laboriously gained, results in material advantages, not to us medical men, but to our patients, the public. This same public insists on the one hand, that the men in this colony who adopt medicine as a career, shall qualify

themselves by a course of studies extending over five years. On the other hand, they permit persons who have gone through no training whatever, to exercise the calling without let or hindrance.

The exhibition of pathological specimens forms an interesting and important item in the business of our ordinary meetings. They were placed last on the programme, and on that account claimed less attention than was perhaps their due. At all events some of the members thought so, and considered it advisable to have an occasional pathological night, when the showing of specimens, and commenting upon them, should form the principal business of the meeting. This was tried on one occasion, but I cannot say that the experiment was marked by any great success, and it is probable that we shall have to revert to our old practice of exhibiting pathological and other specimens at the end of the ordinary meetings. In this age of increasing activities, when time bears such an enhanced value, I am sure that some alteration should be made in the direction of curtailing the length of papers. The presentation of short notes and memoranda of subjects suggestive of discussion, and the exhibition of specimens living and otherwise, would engage a much larger number of workers in the business of our Society, and would add very much to the interest of our meetings.

A Royal Commission, with Professor Allen as Chairman, and Dr. G. A. Syme as Secretary, was appointed in March, "To Inquire into, and Report upon, the Sanitary Condition of Melbourne and its Suburbs." Many meetings have been held, and evidence taken on the subject of abattoirs, noxious trades, the milk supply and control of dairies, the water supply and the pollution of the Yan Yean; and also on the important question of sewage and the disposal of refuse, as well as on a system of deep drainage for Melbourne. The Commission has personally inspected the schemes of sewage at Adelaide and Sydney, and in both cities has obtained the evidence of experts on the spot, as well as that of competent English engineers on the subject. It is to be hoped, and I think from the constitution of the Board, expected, that some good may result from their labours, which as yet are far from being completed. Their business is limited to pointing out the evil, and suggesting a remedy; upon the Government of the day devolves the onus of carrying into practice the recommendations of the Commission, and a grave

responsibility will rest upon them if they fail in their duty. Let us consider for a moment what insanitation in a community means. It means amongst a host of other evils, diphtheria, typhoid, and consumption, fell diseases which annually claim a number of victims, if I may so express it, much in excess of their due. I hold that the mortality from these is much greater than it need be, or in other words, that a number of deaths occur every year amongst us from easily preventible causes. In the principal towns and cities of England, the annual death-rate from typhoid fever is under 3 per 10,000 ; in Melbourne and suburbs it amounts to between 7 and 8, or more than double the number, and the worst of it is, that instead of diminishing, as it has done in England and on the Continent of Europe, it is on the increase in Victoria. Why is this ? I do not think there can be any doubt about the reply. This unnecessary mortality from typhoid, and probably also from diphtheria, is caused by general insanitary conditions, and particularly by bad drainage. The experience of Europe has taught us that, wherever the drinking water is pure, and the drainage good, typhoid is kept in abeyance ; but where the contrary conditions, of impure water supply and foul drains are found, it may be safely predicted, that typhoid will not only exist, but will flourish greatly. And again, there can be no doubt that consumption is closely associated with insanitary conditions of living, and more particularly, with foul air and over-crowding. In the country and in those who lead an out-door life, it prevails less than in towns and amongst those whose avocations confine them much within doors. High up in mountains, where the population is sparse and the air pure, it is virtually unknown ; but where the opposite conditions of overcrowding and impure air exist, there also will consumption be found to flourish. Here in Melbourne, beneath sunny skies and in a land of plenty, where poverty and starvation are unknown, consumption is almost as widely prevalent as it is amongst the teeming populations of the older countries. There is here an evil tendency towards the segregation of a large part of the population in a few towns, which I fear cannot be prevented, but the evil results of such overcrowding may be, to some extent, mitigated by wise sanitary legislation. For example, it might be possible to prevent speculators and others who do not know better, from erecting buildings meant for human habitation on sites wholly undrained, and reeking with fluid filth and garbage

of all kinds. They might be obliged to construct them according to proper principles, and with due provision for ventilation. As an example of what may result from the neglect of these principles, let me quote the following from Dr. Ransome's paper on "Tubercular Infective Areas":—"In certain streets and courts (in Salford) consisting of back to back houses, unfurnished with thorough ventilation, tubercular disease was much more common than in other parts of the same town, and such disease occurred again and again in the same houses." Overcrowding then, with its insanitary surrounding, not only favours the development of such diseases as typhoid fever, diphtheria, and consumption, but it also tends to lower the vitality, and produce enfeeblement and physical degeneration of the population. So that it is probable that city populations would undergo a gradual process of deterioration, if indeed they did not entirely die out in time, were it not for the constant supply of country blood which they receive. Is it not, then, a pity that, for want of a little wise prevision and care, a condition of things should be allowed to arise and continue in our midst, which is not only dangerous in the present, but which also is undoubtedly fraught with much evil in the future for the coming generations of Melbourne citizens.

The meeting next week of the Intercolonial Medical Congress will mark a new epoch in the medical history of these colonies; and the exchange of ideas, if I may so put it, which is sure to take place, from the reading and discussion of many scientific subjects, by and before so large an assemblage of professional men, is sure to bear good fruit. The bringing together from all parts of Australia of so large a number of our professional brethren as we hope to see here, and making adequate preparations for their entertainment, as well as for carrying on the business of the Congress has been largely due to the indefatigable industry and perseverance of the President and General Secretary of the Congress, Mr. T. N. FitzGerald and Professor Allen. I have no fear as to the success of the undertaking, and not the least of its results will be the adding of another strand to the silken cable, which, ere many years have passed, shall bind these colonies together as a federated Australia.

Dr. HAIG moved, and Mr. T. N. FITZGERALD seconded, a vote of thanks to Dr. Ryan for the valuable address he had given. The vote was put, and carried by acclamation.

The meeting then terminated.

ROLL OF MEMBERS.

The following is the roll of members up to December 31, 1888. Asterisks are placed before the names of those who have been Presidents :

LIFE MEMBERS.

- Barrett, James William, M.D. et M.S. Melb., F.R.C.S. Eng.
 Bird, Frederick Dougan, M.B. et M.S. Melb., M.R.C.S. Eng.
 *Bird, Samuel Dougan, M.D. St. A. et Melb., L.R.C.P. Lond.,
 M.R.C.S. Eng., L.S.A. Lond.
 *Bowen, Thomas Aubrey, L.K. et Q.C.P.I., M.R.C.S. Eng.
 Burke, Stephen John, M.R.C.S. Eng., L.K.Q.C.P.I.
 *Fetherston, Gerald Henry, M.D. Melb., L.R.C.P. Ed., L.F.P.S.G.,
 L.A.H.D.
 *Fitzgerald, Thomas Naghten, F.R.C.S.I.
 Fletcher, Arthur Augustus, M.D. et B.S. Melb., M.R.C.S. Eng.
 Graham, George Moore, L.K.Q.P.C.I.
 *Haig, William, M.D. Maryland (U.S.)
 *Hewlett, Thomas, M.R.C.S. Eng., L.S.A. Lond.
 Lawrence, Octavius Vernon, M.D. et Ch. B. Melb
 MacInerney, James Richard, L. et L. M.K.Q.C.P.I., L.R.C.S.I.
 et L.A.H.D.
 *Moloney, Patrick, M.B. Melb.
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Australian Medical Journal.

JANUARY 15TH, 1889.

THE CONGRESS.

The Intercolonial Medical Congress of 1889 has been held, and from every point of view has been a magnificent success. It is not an altogether easy matter, however, to quietly

and critically review the results of the great event, because although the Congress is over, the excitement engendered by it has hardly yet subsided ; and because, further, we trust that all its results are yet far from accomplished.

Everyone must have been impressed by the importance assumed by the subject of Sanitation. From the President's inaugural address, to the resolution which was the outcome of the typhoid discussion, the keynote, as it were, of addresses, papers, and speeches, has been the all-importance of sanitary reform—of prevention rather than cure. Sanitation has, in short, suddenly become fashionable, and we can only hope that the fashion may last, and that the public may be fully awakened to the grave responsibility which now rests upon them and their Parliamentary representatives of seeing that the unanimous recommendations of the Congress are carried into effect. Should the only result of the Congress be to rouse the public from their apathy in regard to health matters, this alone would be a complete justification of its existence. The interest taken by the general public in the Congress proceedings is quite remarkable, and the warmest thanks are due to the lay press for the admirable manner in which the doings of the members have been recorded, while the support accorded by His Excellency the Governor, the Premier, and the Government is simply unprecedented, and will no doubt be suitably acknowledged.

At the last International Medical Congress held at Washington, it was a matter of surprise that a gathering of over 5000 medical men from all parts should have received so little attention in the public press, and excited so little general interest. Here, on the contrary, the addresses and more important papers have been so fully and correctly reported in the lay press, that we find it quite unnecessary to record them in the pages of this Journal.

Turning now to the more purely professional aspect of the Congress, its success in this respect has surpassed the most sanguine expectations ; and the fears of those who thought the time too short for the production of good papers, have proved to have been groundless. Not only have papers been numerous, but many have been of an exact and scientific

character. There has been perhaps rather too much tendency in the colonies to laud what is regarded as practical, and even to sneer at would-be scientific physicians and surgeons as impractical theorists. The evident appreciation with which the addresses of Professors Stirling and Stuart were received, shows that this tendency is dying out, and all men whose opinions are of any value must agree with Professor Stuart, that modern practitioners, to be successful, must be scientists, and must (to borrow a phrase from the President) spend the spring, if not the summer, of their days in acquiring exact and scientific methods of thought and research. A thorough and exact knowledge of Physics and Chemistry, of Anatomy and Biology must form the basis on which to build up a scientific Pathology and Pharmacology, and subsequently, a rational Diagnosis and Therapeutics. Exactitude and thoroughness must be the mottoes of the modern practitioner; and the day has passed for men to be successful who judge merely from vague general impressions, or who act, they know not why, from their practical experience.

One other result of this Congress, and the publicity given to its proceedings, will be, we trust, to raise the profession as a whole in the esteem of the general public. It cannot fail to see that the profession is really working for the public good, and is not a mere union of tradesmen, banded together for their own aggrandisement, at the expense of unfortunate patients.

Intercolonial Medical Congress of Australasia.

SECOND SESSION.

MELBOURNE, JANUARY 1889.

The Second Session of the Congress was formally opened by His Excellency the Governor at the Wilson Hall, Melbourne University, on Monday, January 7.

Mr. T. N. Fitzgerald, F.R.C.S.I., the President of the Congress, occupied the chair, and there were over 400 members of the medical profession present from this and the neighbouring colonies, from England, and elsewhere. A number of distinguished

citizens of Melbourne were also present, including Sir James MacBain, President of the Legislative Council ; the Hon. M. H. Davies, Speaker of the Legislative Assembly ; Sir Henry Parkes, Premier of New South Wales ; Mr. Gillies, Premier of Victoria ; Dr. Brownless, Chancellor of the Melbourne University ; Dr. F. F. Goe, Bishop of Melbourne, and many other prominent gentlemen. Sir Henry Loch opened the Congress with a brief but pregnant speech, after which Professor Allen submitted the report of the Executive Committee, and then the president delivered his inaugural address, which is printed elsewhere. Mr. Gillies, on behalf of the Parliament, tendered the welcome of the Government and the people of Victoria to the medical visitors to the Congress. In the afternoon, the members of the Congress and a large number of citizens were entertained at luncheon by His Worship the Mayor. In the evening, the first business sitting of the conference was held at the Freemasons' Hall, when the presidential address in Medicine was read by the Hon. Dr. Taylor, of Brisbane ; and that in Anatomy and Physiology, by Professor Anderson Stuart, of Sydney.

On Tuesday morning, there was a large attendance in the Wilson Hall, to hear the presidential address in Surgery, by Dr. E. C. Stirling, of Adelaide, who chose for his subject "Surgery as a Science ;" and that in Obstetrics and Gynæcology, by Dr. Batchelor, of Dunedin. In the afternoon, sectional meetings were held, and were well attended, the chief interest attaching to the sections of Psychological Medicine, Surgery, and Gynæcology. In the evening, the President of the Congress (Mr. T. N. Fitzgerald) gave a dinner at the Town Hall. Among the guests were His Excellency the Governor, the Premier, the Minister of Education, the Minister of Public Works, the President of the Legislative Council, the Speaker of the Legislative Assembly, and the Mayor of Melbourne. In responding to the toast of his health, the Governor pointed out that while the colony was occasionally almost scared by the possible introduction of cholera or small-pox, there was a general apathy with regard to the ravages of typhoid fever, which was carrying off hundreds of our fellow citizens. He hoped that one result of the Intercolonial Medical Congress would be to bring about a better condition of sanitary affairs.

On Wednesday morning, members visited the Melbourne Hospital and the Yarra Bend Asylum. At 11 o'clock, a general meeting of the Congress was held in the Wilson Hall, for the dis-

cussion of Hydatid Disease. Dr. W. Gardner, Dr. J. Davies Thomas, and other South Australian practitioners read papers advocating radical treatment, viz., incision and the entire removal of the hydatid cysts; while Dr. Sydney Jones, of Sydney, Mr. T. N. Fitzgerald (who related cases extending over an experience of nearly 30 years in the colony), Dr. Bird, sen., and other Victorian practitioners were of opinion that in the great majority of cases simple tapping was equally efficacious, and practically unattended with danger. After luncheon, the sectional meetings were held. His Excellency the Governor paid a visit to the Congress, and witnessed several interesting demonstrations by Professor Anderson Stuart (Sydney) and Dr. Barrett (Melbourne). In the evening, the Governor and Lady Loch received the members at an "At Home" at Government House.

On Thursday morning, Dr. H. N. MacLaurin, of Sydney, gave the presidential address in Hygiene, taking as his subject the comparative mortality in the different colonies from various diseases, as phthisis, diphtheria and typhoid. Then Dr. Camac Wilkinson gave the presidential address in Pathology, in which he dealt with the development of that subject. The afternoon was devoted to sectional meetings, the chief interest centreing in the Surgical section, where Mr. T. N. Fitzgerald read a description of his new operation for talipes, and exhibited a number of cases successfully treated by the method he has devised. In the evening, the members were entertained at dinner at the Town Hall by the Speaker.

On Friday morning, presidential addresses were delivered in Psychological Medicine, by Dr. F. W. Manning; and in Diseases of the Eye, by Dr. Symons. Dr. Manning dealt with Lunacy in the Australian Colonies, and pointed out that insanity was less prevalent amongst the Australian born than among the natives of other countries resident in the colonies. He condemned the proposals of the Victorian Government to substitute cottages for large asylums. In the afternoon, the discussion on Typhoid Fever was held; Dr. James Robertson gave an account of the early history of typhoid in Victoria. He believed the disease was introduced to the colony, and was unknown prior to the discovery of gold. Dr. Carstairs, of Geelong, discussed the etiology of the disease, in which he expressed his opinion that the contagion grew outside the body, and that the condition of its growth was high temperature. Professor Allen gave a short account of a milk

outbreak. Dr. Henderson described an outbreak at Lilydale. Dr. Jamieson pointed out the great regularity of outbreaks every four years. Dr. Kirtikar, of India, remarked that the fever in India was not typhoid, but resembled it in many respects. Several others addressed the meeting, and at the close the following resolutions were agreed to :—

“That the members of the Intercolonial Medical Congress regard it as proved that typhoid fever is a preventible disease, which owes its prevalence mainly to insanitary conditions, and above all to contaminated water supply, defective drainage, and improper disposal of night-soil.”

“That while there is reason to believe that the source of water supply of Melbourne is carefully guarded, it is certain that as regards drainage and night-soil disposal, the arrangements are very unsatisfactory, and that to these defects must be ascribed in a great measure the excessive prevalence of typhoid fever year after year.”

“That in the opinion of the Congress, it is the imperative duty of the Government to take immediate steps for bringing about an improvement of the sanitary condition of Melbourne, and specifically for the construction of a proper system of underground drainage, which shall include the removal of night-soil by water-carriage.”

In the evening, several members were entertained at dinner by the President of the Medical Society, Dr. Balls-Headley, and a concert was given by the President and Executive Commissioners at the International Exhibition.

On Saturday morning, Baron von Mueller delivered the presidential address in Pharmacology, and then it was decided that the next session should be held in Sydney at a date to be fixed by the Medical Societies of New South Wales, and Dr. H. N. MacLaurin was elected president. In the afternoon, a most enjoyable garden party was given at Rupertswood, by Sir William and Lady Clarke.

On Monday, the members had a delightful excursion down the Bay, at the invitation of the Premier and Government of Victoria, and in the evening the Metropolitan Liedertafel held a smoke concert.

It should be mentioned that Professor Allen and Dr. Maudsley gave very interesting pathological demonstrations, and that exhibits of drugs and instruments were shown by Messrs. Burroughs, Wellcome and Co., and Messrs. Mayer and Meltzer.

THE PRESIDENT'S INAUGURAL ADDRESS.

By T. N. FITZGERALD, F.R.C.S.I.

When last year, at the first Medical Congress ever held in the Australasian Colonies, I was chosen President-elect of the next similar gathering, I was very proud to have obtained such an honour. I received with feelings of profound gratitude the expression of confidence and regard that my fellow-workers, in the noblest of all vocations, were so good as to convey to me. And now as I stand before you, who have come hither from every part of Australasia, to take counsel together on matters of grave import, I feel that I have reached the crowning point of my ambition; for I need hardly say, that although material success is very properly an object we may all laudably strive to win, if only we strive fairly and honorably, a still higher prize is that which is conveyed in the willing trust of a whole brotherhood. I wish, therefore, here to declare how deeply sensible I am of the honour of which I was then made the recipient, and how proud I am to occupy the place that now I fill. Let me, however, sincerely assure you, that I feel conscious of considerable diffidence in having so closely to follow the late President, whose eloquent address in Adelaide won from us such enthusiastic and well-merited recognition.

And now let me offer you all a cordial welcome to Melbourne, which some of you I dare say, behold for the first time. Our city has been called "Marvellous Melbourne," and no doubt for some reasons it deserves the title. It is very far from perfect, as we who have lived in it so long very well know. To it then such as it is, I bid you welcome! We will endeavour to make your stay in it as agreeable as we can, so that when you leave us, you may carry away not unpleasant reminiscences of your visit.

Gentlemen, before proceeding further, permit me to offer a few words of explanation. You are no doubt aware, before we left Adelaide, it was agreed that the Congress should be convened in 1890, and this resolution would doubtless have been adhered to, had not the political authorities of the day suddenly decided to hold the Centennial Exhibition and invite all nations. When the Commissioners were debating their preliminaries, a proposition was started that this would be a very favourable opportunity for holding the next session of the Congress. The suggestion at first encountered serious opposition from many who are generally foremost in support of any movement that tends to the advance of medicine, and whose opinions deserved most attentive consideration. The change contemplated was no doubt an important one, more especially as it

involved a direct departure from the resolution agreed upon in Adelaide; but it was urged that, although a year's time was a very short interval between the two meetings, and allowed but a brief space to collect fresh facts and arrange material, yet the chance was too opportune to be missed. At another time, the means of travelling from distant parts would not be so easy, and assistance from other sources might not be so readily attainable. Consequently it was determined, on a full vote of the profession, to alter the Adelaide programme, and to convene our gathering this year. The date being fixed, those who had opposed the alteration the most strongly, very generously consented to act with the larger section, so that we have since worked together in perfect harmony. In making the preliminary arrangements, I am delighted to say that the fear expressed by the opponents to the change, that the time would be too short to collect sufficient material, has not been justified by results, and that we have experienced from all quarters a most gratifying readiness to co-operate with us in making the Congress an unqualified success.

It has been asked, what are the especial advantages to be looked for from an Australian Medical Congress? What practical good is likely to come from the gathering together of medical men in these southern lands? Are there, it is demanded, any diseases peculiar to Australia, or affections which have not been investigated exhaustively by the highest authorities in Europe? Do the conditions of climate and the social habits of the people modify diseases? or do certain affections, which are common to all latitudes, assume here particular characters that differentiate them from the aspect they present under other geographical circumstances?

I do not forget that, on the other side of the world, and especially in those large centres of human life, where the perils of existence and the factors of disease are so many and so constant, the finest intellects are continually engaged investigating in every branch and every branchlet of the compound science of medicine. They have abundant means, elaborate appliances, the fullest opportunity and uninterrupted leisure at their command, to work out the problems which continually are spread before them. The microscope enables them to make additions every day to the sum of that division of the medical sciences, which half a century ago, or even less, may be said to have had no existence. Histology is thus always revealing to them, and through them to the whole medical world, something new. The chemist in like manner is for ever throwing light upon etiology, pathology, and, especially in its larger significance, therapeutics. There are very many

highly accomplished men content in their enthusiasm to spend the spring-time and early summer of their lives in the exhausting work of hospital duty ; happy and well enough rewarded, in their own esteem, if they but do now and then, amid the thousands of routine cases they have to treat, light upon some new clinical fact, or discover some hitherto unrecognised action of a drug. Surely, asks the pessimist querist, your local medical societies suffice for the report of unusual cases, and the exhibition of anatomical peculiarities or rare distortions ; why then, with puny strength, endeavour to emulate the mighty efforts of the northern hemispheres, having in remembrance that some of their endeavours have not been crowned with perfect success ?

We do not, we cannot hope to bear comparison with the great medical gatherings of the congresses or associations in Europe. But with all becoming humility, and with the admission that we cannot hope for some years successfully to rival our brethren in the healing craft in the old world, I have yet to say that we have here three thousand medical men, educated and trained in the same way, and qualified up to the same limits, as are those at home. We have amongst us representatives of nearly every medical school or college in Europe, who have opportunities of studying and treating disease and of maturing their knowledge, both in private and hospital practice. Then again, as we all well know, in many medical and surgical affections, the practice adopted by some of the leading men in the different colonies is decidedly at variance (whether rightly or wrongly) with the views held by home authorities. Surely therefore we are able to add something to the sum of that knowledge which we have as a kind of joint-stock, and to the enlargement of which it should be both our duty and pleasure to contribute.

To reply further, it should be remembered that though the habits and conditions under which we live bear a social similitude, yet they are by no means identical with those existing in Europe. In the older civilizations and in America, we see the working population of the cities crowded together in a manner utterly unknown to us. The facts lately published by the Special Sanitary Commissioners of the *Lancet*, on the sweating system among tailors in Liverpool and Manchester, must be an incomprehensible revelation to the native born of these colonies. In the rural districts of the old country, the labourers are ill and insufficiently fed, ill-clothed, over-worked, and everywhere subjected to the extremes of cold or heat in their seasons. The wealthy for the most part, especially the females, are fashion worshippers, self-indulgent, and almost entirely unemployed, the more active alone finding vent for their energies in eleemosynary efforts.

With us, on the other hand, the cities are wide spread (too much so if anything), each man, even to the poorest, lives in his own house, animal food is plentiful and cheap, the hours of labour are short, and summer and winter are much the same, except that in their seasons occasionally the hot days are hotter, and the cold days are colder. Such weather as is implied by the terms zero, blizzard, continuous rain, ice-storms, &c., we are acquainted with, only through newspaper, description. On certain days it is true the heat is apt to be oppressive, specially to the inactive, and trying to the aged and sick, yet it can never be said to be unbearable, or inimical to life. Then again, the difficulty and often impossibility of ensuring constant domestic service, compel even the most opulent of this community to do for themselves what they would be glad to pay others to do for them, and thus in the performance of household work, our gentlewomen procure for themselves an amount of bodily exercise, which, although unsought and sometimes unwelcome, is a distinct benefit to them, and there can be no question that it saves them from many ills to which they would otherwise be subjected. Thus then, in this continent we find men of all classes living under the most favourable circumstances. Climate nearly all that can be wished for, healthy inheritance, both mentally and physically, ample space for every one, and well required industry prevailing everywhere.

Surely with these happy surroundings, which exist, as far as I am aware, to such an extent in no other place, we have a spacious field, especially our own property, for investigating disease as it occurs uninfluenced by the many causes which excite and maintain it at home. For instance, we have long been taught, rightly or wrongly, that scrofula and tubercle are affected by squalor and dirt; that phthisis is favoured by close vitiated atmosphere and cold night air. These causes are present but to a slight extent with us, yet occasionally we find scrofulous impregnations excessively virulent; while phthisis is as common with us as it is in England, and decidedly more so than in Canada and Scotland.

Again, here in this land, certain acquired constitutional diseases in the tertiary ulcerative forms, such as rupia, are comparatively mild affections, and seldom present that grave character which is such a continual source of anxiety to the European practitioner. As a corollary to the limited intensity of such affections, we would expect to find skin diseases rare and mild in character. Is this the case? We are a busy people, yet melancholia is a common form of insanity to be met with in our asylums. Then again, do we enjoy an immunity from the nervous diseases so frequently to be met with in the great

manufacturing and mercantile centres of Great Britain? And if we do not, what is the explanation? It is not difficult to discover, therefore, that the field for observation is here very wide, and, that in whatever direction of special knowledge we may look, there is an abundance of matter to interest and occupy us, without at all travelling over trodden paths, or turning over ground which has yielded up all its nutrient elements to the cultivator.

There are a number of similar questions we can ask ourselves, and our peculiarly happy circumstances will perhaps allow us, by a process of elimination, to throw a light on obscurities, and to regard causes from a point of view from which, without these advantages, they cannot be seen by the profession at home. So too, should we ask ourselves, cannot advantage be taken of our almost unlimited space to bring under control such distressing social maladies as habitual drunkenness? Then again, is not this the opportunity to come to some agreement as to where a suitable mountain residence can be found for the delicate and consumptive? Whether a better treatment may not be advised in counselling protracted change—summering in New Zealand or Tasmania, wintering in Queensland, and spending the intermediate time in one of the other colonies?—for we have all climates with us.

To arrive at any definite conclusion on these and many other matters, a consensus of opinion is required, and this can only be obtained by such a gathering of the profession as I see before me now. If our environments are healthful, and certainly they should be so, the young manhood of this country, who, for the past few years only, has become an influence in its Councils, should present a type of the highest class. His birthright, the political freedom which has been handed down by his fathers; his inheritance, the home life, the decorum and gravity of a race bred under a cold ungenial sun; untrammelled educational establishments at his very door, no class distinction to sneer him down, and every opportunity to gratify any inclination either in the playground, the workshop, or study—the Australian native should stand forth as the creature best able on earth to resist disease, and the most willing to listen to wholesome advice on sanitation. His love of out-door sports, engendered by easy hours of labour and the many open reserves, saves him from the several temptations which surround life at the time of its pubertal development. Whilst the constant sunshine, the frequently recurring holidays, and variety of amusements relieve his toil from the chilling monotony that in other countries is the parent of habitual intemperance. Why then,

in such an apparent paradise, peopled by those who ought to be Hercules and Apollos, are our death rates so high? This is a question that doubtless the Congress will enquire into, and its deliberations will, I trust, throw some light upon these vexed matters of drainage, ventilation, and other items that so intimately affect the sweetness and healthfulness of life.

I wish, however, to draw attention to one or two points which, though perhaps well known to the profession, are not generally recognised by the public at large. In all English-speaking communities, the mortality bills are swelled principally by three affections—alcoholic intemperance, tubercular deposits, and typhoid fever—scourges in the main preventable; but the remedies for which, either from their expense, or from other causes, we will not boldly and manfully face.

First, then, with regard to drink. You all know how inimical to treatment its effects are, and how great is the misery it occasions. I have no wish to read you a teetotal lecture; there is, however, one peculiarity which stands out rather prominently, and which I think should have weight with us all, when, as medical men, we are called upon to prescribe spirits as a drug; and that is the fact, that alcohol is much more potent with us than it is at home. If we turn to the statistics that Mr. Hayter annually furnishes to the Government of Victoria, we find that the deaths set down to drink are numerous compared with those of even the most intemperate countries; and such a calculation would naturally lead to the assumption, that we Australians are an extremely drunken people. I do not desire to go out of my way to find excuses for much excess in this particular, nor would it be proper for me to say that there is no drunkenness in Australia, but I assert with the strongest emphasis, that habitual drunkenness is an exception with us. Visitors from abroad who have been to any of our great gatherings, at military displays, and racing carnivals, or who have seen the crowded attendances at athletic meetings in any of the colonies, must have noticed the absence of drunkenness and rowdyism. What really is the case is, that alcohol, in whatever form it may be taken, is not suited to the climate or the conditions of the people, so that hepatic and renal affections are sooner and more frequently engendered by its use, than they would be under the same circumstances in a colder country.

Looking at the habits of European populations, however, I cannot but regard it as a slander upon our manhood, to charge them with systematic drunkenness. A great number of our native-born youths are total abstainers from birth, and, while not forgetting the intemperate

opinions sometimes expressed by temperance advocates, I must admit that temperance societies have worked a great deal of useful reform. As a food in the low delirium of fever, and as a means of preventing waste of tissue in erysipelas and kindred diseases, and for the aged, alcohol is doubtless essential and of great service. Yet the death-rate ought, I think, to teach us the necessity of care in the use of intoxicating liquor, and that, as medical men, we should be very cautious, far more so than our brethren have need to be in colder climates. What we have to regard is the great probability of its continued and over-moderate use being prolonged, when the necessity for its employment has ceased; and of its setting up local congestions, which, in time, destroy the functions of the organs they affect.

Of Phthisis and Typhoid Fever, I have already said that the former appears to be nearly as common in Australasian as in English towns; and typhoid, both in urban and rural districts, is nearly of twice as frequent occurrence. I think it offers occasion for the gravest consideration to discover how, in a country so richly endowed, and with a climate so genial, we should yet be afflicted to so terrible an extent with two diseases of parasitic origin, both of which, pathologists assure us, are eradicable. It is curious to notice how the etiology of phthisis has varied amongst physicians from time to time. In my early days, it was impressed upon us that consumption chiefly arose from defective ventilation, and the inhalation of irritant particles. Then came the catarrhal or pneumonic origins—neglected colds and so forth, and now we find that neither nor all of these reasons will suffice to account for the large bills of mortality from phthisis in this land. In my opinion, next to its hereditary inception, the greater part of phthisis will be found to be associated with defective drainage, and this, I believe, will be proved by bacteriology. I cannot but think, therefore, that it will always be endemic with us until we devise some proper and complete method of carrying off our sewage and fluid house refuse.

Typhoid fever is with us a true *opprobrium medicorum*. It is with us, of us, among us, upon us. It is a spectre we apparently cannot exorcise. It is truly "the pestilence that walketh in darkness, and the destruction that wasteth at noonday." It is at once a terror and a reproach. It defies legislation and administration, it laughs at boards of health, and triumphs ruthlessly and always. Are we never to cope with this terrible affection? As far as Melbourne is concerned, we hope much from the Commission which is now holding its meetings; and we trust that whatever scheme is decided upon, it will be adopted

without the long delay that generally follows the decisions of such bodies. But in the meantime, the same things go on. Streets are marked out, and houses are built without the semblance of drainage. Then the warm weather comes, and fever stalks each year more greedily and viciously than before. No doubt the section constituted to discuss these matters relating to hygiene and public health will indicate what steps modern sanitation should take towards the suppression of this conspicuous evil. The views of medical men and health officers are always valuable when they take some practical step, especially on such a subject as public health. On such matters they alone, from their educational training, are capable of expressing opinions worth listening to. I sincerely trust our health boards will derive information from the deliberations of the Section of Hygiene.

Gentlemen, all branches of our profession seem steadily to advance. Annually, some new surgical measures are contrived, some new drugs are introduced, some disorders discriminated. What future is there for Sanitation? Sanitation, unlike other divisions of our art, must go hand in hand with the educational progress and mental improvement of the people. Without the schoolmaster, all efforts we could make must inevitably prove futile. An intelligent conception of its purposes by the authorities, both parliamentary and local, is absolutely necessary. It is here that I hope much may result from such a gathering as this Congress, for in all matters that relate to medical and sanitary requirements it seems to be nearly an invariable rule for legislative enactments to be considerably in arrears. With borough and shire authorities, I believe these bodies do, in the main, the best their lights permit them, but the insanitary conditions of their respective localities are attributable I conceive to either a want of information, or a reluctance to exercise their powers. Because diphtheria happens to be absent for a time from their district, they fail to see danger in a cesspit, or the necessity of milk inspection, and so forth. Doubtless the advanced education the young are receiving, in at least the better class of schools, the instruction in the elements of physiology and the general principles of hygiene, will in time have its effect on our future statesmen and councillors. And in this direction I think much benefit might accrue from the appointment of a few thoroughly trained and carefully chosen sanitary instructors, whose duty it should be to travel from town to town, and even from house to house, with the object of teaching the principles and the advantages of Health Laws, and the consequences of a disregard of them. For it is certain, that the value of cleanliness cannot be properly understood until the dangers of filth are comprehended.

I should like while on this subject, to say something in strong praise of the hygienic arrangements that have been carried out in Adelaide. The method of drainage appears to be as nearly perfect as it can well be, and as there is a large model of the system in the South Australian Court of the Exhibition, it would be well that every one interested in this subject should see it. If it be possible to adopt in this much larger city the same system, I am prepared to say that the death rate would be lowered to an extent now hardly dreamed of. Nor is the incidental advantage in connection with this system of the disposal of the sewage to be lost sight of. The Adelaide sewerage farm is a very joy of scientific agriculture. In Sydney they are commencing with earnestness to drain their busy city; and although the underground drainage of Melbourne is at present little more than rudimentary, we have at least made a beginning.

But what is more encouraging, and prognosticates well for the generation that is to follow us, is the lusty out-door life, and the sturdy games the Australian so dearly loves. Amongst those who ever have seriously revolved the subject in their minds, some doubt must have arisen whether the youth of these great colonies would walk in the steps of their parents, or influenced by a hotter sun, follow in the wake of their American kinsmen, and forsake the green sward for light amusements, ease, and luxury. I rejoice to say that this question is entirely set at rest, the Australian's prowess on the river and the cricket field has settled that matter, and he promises as far as physical development goes, to even surpass his fathers. It is rather extraordinary that the out-door life and national games of the mother country should have taken such a hold on the young folk of Australasia, for I believe in no other part of the world have the sons of the Anglo-Saxon or Celtic emigrants done the same. Certainly, in America or South Africa, neither cricket or football is generally played. Now the love of these manly games must have an influence for good on the manhood of this country. Personally, I have no sympathy with those who would decry these athletic exercises, either because at times they may be carried out too roughly, or sometimes are accompanied by some degree of danger. The very roughness of football is an element of good. It developes courage and good temper; one hears too much now-a-days about gentleness and the velvet hand. We require a little fibre which these games tend to impart. When I look at the footballer ready for action, I cannot help admiring his muscular frame, and sympathising with him in the pride he takes in his sturdy limbs, his form, and activity. Contrast him with

the boy one meets with on the Continent, parading through the streets. Which is the more likely to grow up a self-reliant, useful citizen, the footballer or the young gentleman who spins his tops and bowls his hoops in gravelled enclosures? Depend upon it, these games are important factors in the formation of the moral tone of this country. We should encourage them to the best of our powers, and endeavour to allay the fears of timid over-anxious parents. If a few limbs are broken annually, and even now and then unfortunately a death occurs, it would be better that four times the number of casualties should be told, than that our boys should grow up hypochondriacal and dyspeptic.

Looking round this assemblage of representatives of the great Guild of Medicine, drawn here from every province of Australasia, I cannot deny myself the pleasure of thinking that we are all students, still engaged in the work upon which we entered, some of us, many years ago. We have had our ambitions, our difficulties, our trials, our disappointments, and now and then our successes. We have been engaged in the hard business of living; we have had to contend with opposition on many occasions, and sometimes we have had good reason to believe we were not too fairly dealt with. However, I am sure it has been the consolation of all of us to feel, that in the acquirement of the knowledge necessary for the exercise of our craft, we commanded a source of enjoyment that nothing in the way of fret or ill or mere professional failure could take from us. We have thus all added something to the common store of medical knowledge. We have in this way experienced a delight compared with which the greatest material success holds only subordinate place. Like another God-like attribute, the *ars medendi* "blesseth him that gives and him that takes." It is a delight to make discovery in our science; but I am sure it is a delight still greater to know that the discovery may be of service to our professional brethren in relieving suffering humanity. It is thus a privilege to thank God for, that our domain of discovery can never be exhausted, and that no matter how great may be the researches of others, there is still left room for us to go on exploring. It is the very glory of medicine that it is not finite. It has been brought against it as a reproach, that both its principles and its practice are always undergoing changes. I reply, with a feeling of triumph, that these changes are the very evidence of our progress. If we have a motto at all, it is "Onward." It is not our despair but our boast, that medicine is not an exact science. We are not content with what we have done, but we look forward to the greater, the better, and the higher doing. "Still achieving, still pursuing" we "learn to labour,"

and if we "wait" at all, it is not in the dull apathy of contentment at what has been done, but in the belief that "the Greatest is behind." It is with this feeling, this hope, this ever constant and unswerving faith, that I regard the coming together of my brethren on this the opening day of the Second Session of the Medical Congress of Australasia.

Obituary.

WILLIAM GODFREY HOWITT, M.R.C.S. ENG.

Mr. Howitt was the eldest son of Dr. Godfrey Howitt, and the nephew of that William Howitt, who will long live in the affectionate memory of all lovers of healthy English literature. He came out to this colony, with his father, in 1840, when only seven years of age, and his education and training, therefore, were distinctly Australian. His father being wishful that he should belong, like himself, to the great guild of medicine, sent him to the old country in 1851, for the purpose of qualifying himself to this end, and was wishful that he should graduate in medicine in Edinburgh, or in the University of London. He, however, contented himself with the diploma of M.R.C.S. Eng., and returned hither in 1855, and shortly after his arrival, was appointed house-surgeon of the Melbourne Hospital, an office he held for some time. On relinquishing this position, he engaged in general practice, and took up his residence in Collins Street East, and on the death of his father in 1873, he removed to the house, now only a memory of the early days of Melbourne, at the corner of Collins Street and Spring Street, where he resided until about seven years ago, when he removed, first into Little Flinders Street, and afterwards into Albert Street, where he died.

Mr. Howitt was, for many years, one of the Honorary Surgeons of the Melbourne Hospital, and he had the deserved reputation, both of being a good operator and quick and safe in diagnosis. It was, perhaps, his misfortune that he was not dependent upon his professional success for the means of living, else might he have won a much larger amount of material prosperity. He was a true gentleman, a genuinely kind-hearted man, and he took the world easily and pleasantly. Everybody liked him, both because he was the son of that fine old English physician, of whom, unhappily, the race seems to be dying out, and

because he was a thoroughly companionable good fellow, whom it was a pleasure and a privilege to know. Some months ago, he became aware that he was the subject of malignant disease of the superior maxilla. Excision was performed by Mr. Fitzgerald, with some measure of relief, but the inevitable end soon came, and he died on the 2nd of this month, after much suffering. He leaves a widow and five children, the eldest of whom is a not undistinguished graduate of our own University, and at present, one of the resident staff of the Melbourne Hospital.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee held on the 8th inst., a letter was received from Dr. J. P. Ryan, one of the hon. medical officers, tendering his resignation, owing to an appointment which he had accepted at the Eye and Ear Hospital. The resignation was accepted with regret.

Dr. Lewellin, the medical superintendent, wrote applying for a month's leave of absence. The request was complied with, subject to Dr. J. P. Ryan consenting to hold his office until the return of Dr. Lewellin.

A communication was received from Mr. C. Curtis, dispenser at the institution, who had been granted partial leave of absence owing to a domestic bereavement, tendering his resignation on the ground of ill-health, and expressing great regret at having to sever his connection with the institution, in which he had held the position of dispenser for upwards of 35 years. The resignation was accepted, and it was decided to request the drug committee to take into consideration what recognition should be made of Mr. Curtis's services.

The Secretary reported that Mr. Woods, the assistant-dispenser, who had held the position for upwards of nine years, was competent to take full charge of the department, and he was therefore appointed to the position rendered vacant by Mr. Curtis's resignation, the question of appointing an assistant being deferred for the present.

THE ALFRED HOSPITAL.

On the 26th ult., at 11 a.m. a fire broke out in the west wing of the Hospital. The roof was completely destroyed, and much damage was done to the walls and floor of the upstairs wards. The patients were all removed unharmed. The origin of the fire is unknown. The damage is estimated at £2500. At present the patients are accommodated in tents, lent by the Defence Department. At the meeting of the Committee held on the 11th inst., the tender of Mr. Brewer, for £1739, for the re-erection of the west wing was accepted.

At the meeting of the Committee of Management, held on the 11th inst., the resignation of Mr. John F. Anderson, as Secretary and Superintendent of the Hospital, was accepted. The salary for the new Secretary was fixed at £300 per annum, with £50 in lieu of house rent.

THE WOMEN'S HOSPITAL.

At the meeting of Committee held on the 14th ult., a sub-committee, consisting of Mrs. Goe (President), Lady Clarke, Mrs. Davies, Mrs. Nicolson, Mrs. Thornley, Major Goldstein, Mr. J. Grice, and Mr. W. E. King, was appointed to take evidence as to whether it is desirable to admit post-partum and puerperal cases to the infirmary wards of the hospital, and report to the Board.

At the meeting of Committee held the following week, the sub-committee presented its report, which in effect recommended that such cases should be excluded from that department. As the report was adopted by the managing committee, and is to be given effect to, the Hospital is now totally closed to cases of that kind, and any liability of infection to the in-patients is considered to be effectually prevented. In order, however, that women suffering from puerperal fever or other diseases precluding their admission to the Hospital might not be in want of proper treatment, it was decided that those who had not the means to procure the requisite attendance for themselves, should be provided, at the cost of the Hospital, with nurses and medical comforts at their own homes.

The Resident Medical Officer's Report for the quarter ending December 31st, showed that the number of patients admitted for confinement during that period was 198, of which 177 had been

confined. Out of this number there had been four maternal deaths, three of which had been caused by puerperal convulsions, and one by heart disease.

THE HOSPITAL SATURDAY AND SUNDAY FUND.

On Thursday, December 20th, the Hospital Sunday Fund was distributed by the Mayor of Melbourne (Alderman Benjamin). The amount distributed to the medical charities is £12,482, an excess over any previous year. On the usual basis, the allocation is as follows :—

Melbourne Hospital	...	...	£3604	3	11
Alfred Hospital	...	...	1913	3	3
Benevolent Asylum	...	...	1002	3	3
Women's Hospital	...	...	1107	9	0
Hospital for Sick Children	...	...	1876	11	6
Eye and Ear Hospital	...	...	661	18	3
Homœopathic Hospital	...	..	961	14	4
Austin Hospital	...	...	712	12	5
Immigrants' Aid Society	...	...	437	4	1

The special votes were :—

Collingwood Free Dispensary	...	100	0	0
Richmond Dispensary	...	50	0	0
Convalescent Home for Women	...	30	0	0
Convalescent Home for Men	..	25	0	0

Vital Statistics.

The Government Statist's monthly report on the vital statistics of Melbourne and suburbs for November 1888, shows that the births of 1329 children, viz., 692 boys and 637 girls were registered. The deaths registered numbered 819, viz., 445 males and 374 females. The births thus exceeded the deaths by 510 or 62 per cent.

To every 1000 of the population of the district, the proportion of births registered was 3·39, and of deaths 2·09.

One hundred and fifty deaths, or 18 per cent. of the whole, took place in public institutions.

The number of children under one year who died was 323, the total number under 5 years being 385.

As compared with the previous month, deaths from diphtheria fell from 9 to 8, those from typhoid fever from 10 to 8, and those from measles from 3 to 1. On the other hand, deaths from diarrhoeal diseases rose from 9 to as many as 87, those from scarlet fever from 2 to 5, and a large increase took place in deaths from diseases of the stomach and bowels. Ten deaths of child-bearing women occurred during the month, as against 7 in October. If these numbers be compared with the births, it will be found that 1 death of a mother took place to every 133 births registered during the month under notice, and 1 to every 210 such births in the previous month.

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—Gerald Eugene Cussen, Carlton, M.B. Melb. 1888; Francis Edward Webb, Melbourne, M.B. Melb. 1888; William Howard James, Ballarat, M.B. Melb. 1888; James Ferdinand Rudall, Melbourne, M.B. Melb. 1888; John Chalmers Baird, Melbourne, M.B. Melb. 1888; Francis John Drake, Melbourne, M.B. Melb. 1888; Arthur Gideon Hugh Colquhoun, Melbourne, M.B. Melb. 1888; Patrick James Flanagan, Melbourne, M.B. Melb. 1888; William Perrin Norris, Parkville, M.B. Melb. 1888; Charles Seal, Buninyong, M.B. Melb. 1888; Thomas Murphy, Melbourne, M.B. Melb. 1888; Thomas John Moore Kennedy, Ballarat, M.B. Melb. 1888; Edward Alan Mackay, Carlton, M.B. Melb. 1888; Edward Leslie Gault, Melbourne, M.B. Melb. 1888; Charles Herbert Hill, Melbourne, M.B. Melb. 1888; Edward George Erson, Prahran, L. et L. Mid. R.C.P. Edin. 1876; William Morrow Lewis, Melbourne, M.D. 1886, Ch. M. 1887, R. Univ. Irel., L. Mid. K.Q.C.P. Irel. 1887; Walter Henry Tofft, Corowa, N.S.W., M.B. et Ch. M. Edin. 1887; John Thomas Harvey, Melbourne, M.B. et Ch. M. Edin. 1885, M.R.C.S. Eng. 1886.

Additional qualifications registered:—Frank Hobill Cole, Carlton, Ch. B. Melb. 1887; Frank Smith Crowther, Brighton, Ch. B. Melb. 1888; Francis A. Bennet, Bairnsdale, M.D. Aberd. 1888.

Names of deceased medical practitioners erased from the Register:—No. 824, George Maxwell, L.F.P.S.; No. 552, George Wakefield, L.S.A.; No. 27, William G. Howitt, M.R.C.S.

HEALTH OFFICERS.—The following appointments have been confirmed:—Shire of Ballarat—George F. Wickens, M.B., *vice* John Gurdon, M.R.C.S., resigned Shire of Bet Bet—John F. W. Manson, M.B., *vice* John A. Sutherland, L.R.C.P., resigned; Shire of Healesville—William Kilpatrick, M.B., *vice* Bernard Stevenson, L.R.C.P., resigned.

PUBLIC VACCINATOR.—The following appointment has been made :—James Wilson Bett, M.B., to be Public Vaccinator for Kyabram, *vice* J. H. Carney, M.B., whose resignation has been accepted.

VICTORIAN MILITARY FORCES.—Surgeon-Major Andrew Sexton Gray and Surgeon-Major Gerald Henry Fetherston, M.D., have been transferred from the fixed establishment, to be Surgeon-Majors on the Unattached List from the 1st of January, 1899; and their services have been extended for a further period of one year from the 31st of December, 1888; Surgeon-Major James Patrick Ryan and Surgeon John Edward Andrew have been placed on the Retired List. George Talbot Wooley, M.R.C.S., has been appointed a Surgeon on probation, with the relative rank of Captain. Surgeon the Honorable James George Beaney, M.D., has been transferred from the fixed establishment, to be a Surgeon on the Unattached List. The following appointments have been made :—Surgeon Robert Denham Pinnock, M.D., and Surgeon Thomas Falkner Fleetwood, M.B., to be Surgeon-Majors, *vice* Surgeon-Major A. S. Gray and Surgeon-Major G. H. Fetherston, M.D., transferred to the Unattached List; Surgeon Frederic Dougan Bird, from the Unattached List, to be Surgeon, *vice* Surgeon-Major A. S. Gray, transferred to the Unattached List; Surgeon Robert Andrew Stirling, M.B., Unattached List, to be Surgeon, *vice* Surgeon-Major G. H. Fetherston, M.D., transferred to the Unattached List; Surgeon Henry Michael O'Hara, Unattached List, to be Surgeon, *vice* Surgeon the Honorable J. G. Beaney, M.D., transferred to the Unattached List.

THE PUBLIC HEALTH ACT 1888.—The diseases specified in the subjoined list are included in the descriptions stated respectively at the head of each group, viz. :—Malignant Infectious or Contagious Diseases.—Small-pox, Asiatic cholera, plague, yellow fever, and typhus fever. Dangerous Infectious or Contagious Disease, and Dangerous Infectious Disease.—Small-pox, Asiatic cholera, plague, yellow fever, typhus fever, measles, scarlet fever, typhoid fever, diphtheria, and whooping cough.

Dr. Cruikshank died at Sandhurst on the 11th inst. He had been a resident of Bendigo for over 30 years, and for many years acted as health officer. He was 85 years of age.

PROSECUTION FOR VIVISECTION.—At the Brighton Police Court on the 14th ult., Dr. S. Mannington Caffyn was charged at the instance of the Society for the Protection of Animals with cruelty to a dog, and by the police with practising vivisection. After the evidence of Sergeant Ryan and Thomas Latham, an inspector for the Society for the Protection of Animals, Dr. Caffyn addressed the Bench, remarking that he had been charged with two offences, the one cruelty and the other vivisection. He contended that he was guilty of neither charge. He was experimenting for the benefit of humanity; there was not the slightest cruelty attached to the operation, any more than there was in injecting morphia into human beings; it involved simply a puncture of the skin. He had now almost proved his experiments. He kept two dogs for the purpose; one he fed on the ordinary food given to such animals, the other he fed by means of the injection. The animal he had operated upon had gained 2lb in weight whilst the experiment was being carried on. This was very fair evidence as to the absence of cruelty. One pound of beef extract had been injected beneath the animal's skin, which was by no means acting cruelly towards it. Dr. Gurdon, in support of Dr.

Caffyn's defence, said that, even supposing no food entered the stomach, the animal would suffer no pain. The puncture was a mere nothing; it was simply similar to the prick of a thorn—only momentary—and was not attended by lasting pain. He did not consider the operation a cruel one. The chairman of the Bench said he and his brother magistrate were of opinion that to some extent there had been cruelty practised, but they were not prepared to say to what extent. If the doctor desired to continue these experiments he would have to be registered, and as far as he (the chairman of the Bench) was concerned personally he hoped the doctor would register and continue the experiments. However, a small fine would have to be inflicted, viz.—10s. in each case—and the Bench would award costs to the amount of £1 1s.

At the meeting of the Council of the Melbourne University held on the 17th ult., it was decided that, for the purpose of conferring the degree of M.B. on Mr. C. de Wolfe Heard, who had taken the degree of M.D. at the M'Gill University in the United States, they would recognise the M'Gill University.

BIRTHS.

BROWNE.—On the 15th ult., at William-street, the wife of Dr. Valentine E. Browne, surgeon Victorian Military Forces—a son.

DIXSON.—On the 10th ult., at Vacuna, Drummoyne, Sydney, the wife of Craig Dixson, M.D., of a daughter.

DYRING.—On the 11th ult., at Coburg, the wife of Dr. Carl P. W. Dyring—a daughter.

ROSS.—On the 6th ult., at her residence, Macarthur, the wife of Joseph Ross, M.D.—a son.

MARRIAGE.

NOTT—DICKINSON.—On the 22nd ult., at St. Peter's Church, Box-hill, William Freeman, son of the late Dr. George Nott, of Gawler, S.A., to Ellen (Nellie), only daughter of the late Dr. W. M. Dickinson, of Box-hill.

DEATH.

HOWITT.—On the 2nd inst., at Albert-street, East Melbourne, William Godfrey Howitt, surgeon, aged 55 years.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal

FEBRUARY 15, 1889.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, FEBRUARY 6TH, 1889.

(Hall of the Society, 8 p.m.)

Present:—Dr. Balls-Headley (in the chair), Drs. Armstrong, Bage, Barker, J. W. Barrett, Bennie, Bowen, Burton, Grant, Howard, Iredell, Maudsley, McGibbon, Moore, and Webb.

The minutes of the annual meeting were read and confirmed.

The following were elected new members of the Society:—
Henry Ray, M.D., C.M. Glas., L. et L., M.R.C.P., L.R.C.S. Ed., of Victoria Street, Melbourne, proposed by Dr. Stirling and seconded by Dr. J. P. Ryan; Richard Rawdon Stawell, M.B. Melb., of the Children's Hospital, proposed by Dr. C. S. Ryan and seconded by Dr. J. P. Ryan; Alfred Hobart Sturdee, M.R.C.S. Eng., of Yarraville, proposed by Professor Allen and seconded by Dr. J. W. Barrett. Drs. Maudsley and Howard acted as scrutineers.

Three gentlemen were nominated for election.

The following paper was then read:—

CASE OF FOREIGN BODY IN THE LARYNX—
REMOVAL.

By C L. M. IREDELL.

The case I am about to put before you is, in some respects, a most ordinary one, and it is just because it is so likely to occur to any of you that I think the consideration of it will be useful, and some practical information may be gained.

On December 10 last, I received a telegram from Dr. Foster, of Colac, to the effect that he was sending me down a patient with a pin in the throat.

On the same afternoon the patient, a little girl of 12, presented herself, attended by her mother. Beyond a certain anxious look, she seemed none the worse for her experience, so far as I could judge. She complained of no pain, nor was there any alteration of voice. Under reflected light I examined her pharynx and searched all the folds between the pillars of the fauces, and finding

nothing, mentally regarded it as being one of that disappointing class of cases, where an always interesting foreign body had been, but no longer was. However, to complete the examination, I proceeded to use a laryngoscopic mirror, and immediately I beheld the pin, lying right across the lumen of the larynx, exactly bisecting the angle formed by the vocal chords—that is, so far as the image was concerned. The pin was so embedded that, at first, it was impossible to determine which was the pointed and which the headed end; but, in any case, it was apparent that an ill-considered attempt to remove it might result in the dropping of the pin into the trachea, and possibly further, and thus alter a quiescent state into one of imminent peril. I therefore determined that, for this and other reasons, I would let some friend or friends see the case before I interfered with it.

It, happily, was convenient to obtain the attendance of Drs. Grant and Syme. The image on the mirror gave the appearance of the pin being fixed at an angle of about 45° to the plane of the glottis; but, as Dr. Grant pointed out, it was evident that one end was fixed at the base of the epiglottis, and the other rested in the fissure between the cartilages of Sauterini, thus establishing the fact, that the plane of the pin was parallel with that of the glottis, appearances notwithstanding. Nothing remained to do but to remove it, and, to facilitate this operation, I painted the pharynx and upper part of larynx with a five per cent. solution of cocaine, and endeavoured to introduce a pair of Mackenzie's forceps, with lateral movements; but, although the cocaine acted perfectly as regards the pharynx, and the little girl was an exceptionally good patient, there was no getting the forceps past the epiglottis without a complete spasm, which prevented all action under sight. I made several attempts, but eventually had to send out for a twenty per cent. solution, which acted most beautifully, and the pin was extracted with little or no trouble. I should however mention, that the application of the five per cent. solution so far reduced some little swelling of the arytenoids that, before my final attempt, it could clearly be seen that the head of the pin was in the fissure, and the point fairly transfixing the base of the epiglottis.



The points that I consider to be of especial interest in this case are as follows:—1. As showing the absolute necessity of thorough examination of the larynx for a foreign body, even though, as in this case, there is no distress or symptom indicating its presence there. 2. The value of considering the anatomy of the parts in determining the position of a body. 3. The desirability of pushing the cocaine to a point where you obtain complete anaesthesia. 4. The importance of using no instrument except under sight. Probably this pin would never have been removed without the use of cocaine. It was beyond the power of the little patient to suffer the introduction of instruments, and under chloroform the conditions would have been infinitely more difficult.

Dr. GRANT was present when Mr. Iredell removed the pin from the larynx, and hardly agrees with his description of its position. When he (Dr. Grant) first saw the case, the pin was placed somewhat diagonally. There were two points of special interest in this case. First, the absence of symptoms was noteworthy. It seemed remarkable that a body could lodge in such a position and fail to excite symptoms. It appeared to him to be just possible that it had lodged outside the territory of the superior laryngeal nerve. The case emphasised the importance of the laryngeal examination. Second, the great value of cocaine was also illustrated; without it the pin could not have been removed, because of the intolerance of examination. It seemed also that the cocaine reduced the swelling of the larynx somewhat, and consequently facilitated removal. He must compliment Dr. Iredell on the manipulative dexterity he had displayed.

Dr. J. W. BARRETT had seen a case in which a fishbone was supposed to be stuck in the throat. He had made a laryngoscopic examination, expecting to find nothing, but he found the extremity of a fishbone sticking through the mucous membrane of the pharynx, on its posterior wall, just above the larynx. It was easily removed by guiding the forceps on the finger of the left hand.

Dr. MAUDSLEY had seen at University College Hospital, a child who was said to have swallowed a small shell. A superficial examination was made, and nothing was found. The child was sent away, instructions being given that it was to be brought back in two days. On its return, a laryngoscopic examination was made and the shell was found lodged in the glottis, from

which it was easily removed. In this case, there were no symptoms whatever.

Dr. BALLS-HEADLEY said the case furnished a complete answer to those people who asserted that specialism was a mistake. From the discussion which had taken place, the value of a special manual and mental training was obvious. Dr. Headley had seen a case in which a child had been playing with a cigarette-holder, which had slipped into the trachea. There was doubt as to whether it had actually entered the trachea or had been swallowed at all, and at a consultation of surgeons on the case, one surgeon gave it as his opinion, that it was a case of croup. However, tracheotomy was performed, and the cigarette-holder removed from the trachea.

The following paper was then read :

TREATMENT OF HIP DISEASE.

By J. H. WEBB, M.R.C.S.

My excuse for bringing under your notice such a well thrashed out subject as the "Treatment of Hip Disease," is the extreme unsatisfactoriness of the many methods that have been devised from time to time for the relief of this distressing malady. All sorts of plans have their advocates—some prefer splints, others moxas and hot irons, others extension by weights—each one being convinced that his scheme, or the one he has adopted, succeeds where everything else fails. It was the same a few years ago with the kindred affection—spinal caries, and its attendant abscesses. We were all once under the impression that recovery in these cases was frequently seen, and were unaware of their invariable fatality. We now know that until quite a recent date, until the introduction of antiseptics, the recognition of the value of dependent drainage, and the necessity of removing imprisoned dead bone; we now know that restoration to health, wherever pus from sequestra had to travel far before presenting, never took place. Yet, so sure were the practitioners of the generation just past of the efficacy of setons, cauteries and their like, that any surgeon of that period would have considered it ridiculous to call in question the utility of counter-irritants and spinal supports. Had he been plainly told, that in spite of his experience, in spite of his memory, no such thing as a happy result had ever been witnessed, he would have been more than astonished. However, matters, though nearly, are not quite so bad with hip disease.

Synovial cases do occasionally recover *without lameness*, and when such a rarity is met with, we chuckle to ourselves and inwardly applaud our skill till the next instance occurs, and we find the same kind of treatment proves itself to be as useless as nothing at all.

Conversing on this subject one day with a well-known surgeon of this city, who has an extensive practice amongst children, and who, consequently, sees annually a very large amount of hip-disease—he said, “the treatment of this complaint is really the most unsatisfactory I know of; in all other diseases I can recommend something that one has confidence in, but in hip-disease, I positively affirm that the only remedy I know of, which is of the slightest value, is *rest*, but that is just the thing we cannot give young children.” Up to a recent date, this was exactly my opinion. I think I have applied extension in every way, used every kind of splint, without ever obtaining sufficient success to justify the repetition of any single method; and this is not because of any innate scepticism. I have commenced a method, say extension by pulley, with the thigh elevated to the same axis as the flexion, with every confidence, with the faith of a fanatic, and seen, day by day, the limb retrogress till nothing was left for it but amputation. The same with Thomas’ splint. I have, on more than one occasion, full and fresh from that surgeon’s work, used every exertion, following that gentleman’s advice, to restore my patient, with the result that the whole treatment ended in abscesses, imprisonment of bone, and total destruction of the joint. Now, surely there must be something wrong with our teachings, our practice, when the consequences are so disastrous. Do we understand the pathology of this disease, or what is the reason?

First then, with regard to the treatment by extension, by means of weight and pulley. This is a method, the utility of which I have long had my doubts about, principally because I do not think that any weight which can be borne can possibly overcome the spasm—the contraction of the sartorius. Some three or four years ago I chanced to attend a cripple in his last illness, who for a little time previous to his death had his thigh flexed on his pelvis. For convenience of interment, the undertaker suggested that I should straighten the limb by dividing the contracted muscle; at first I pooh-poohed his proposition, naturally thinking the limb would go down if some kind of

forcible extension were made, but when at the parents' request I endeavoured to redress the thigh, I found to my surprise that no strength I could use had the desired effect. The limb simply could not be got into a straight line with the body, though there was no joint adhesion, and the rigor mortis had been overcome by movement. This experiment may be taken for what it is worth, and it may be urged that it is by continuous extension through the weight and pulley, by a constant tiring of the opposing muscles, that we hope to secure separation of the irritated articular surfaces. This may be true, and perhaps hold good in the earliest stages when the flexion is very slight; but, when we consider what a weight must be required when the lordosis is at all marked, the weight pulling in the same axis as the flexed limb—and it is only thus that the advocates of this manner of extension maintain it can be useful—when we consider what traction must be necessary to successfully oppose a muscle acting at such a great advantage, I think that we must admit that not much can be obtained by this method, without previous subcutaneous division of the muscle or muscles.

A word as to what hip disease really is—as to its pathology. I apprehend that we meet with this malady in three forms, an arbitrary division based on the locality of the affection—synovitis, strumous, or the result of an injury; intra-cotyloid disease of the head of the femur or acetabulum; and sub-periosteal caries around the neck of the femur and within the capsular ligament. At the commencement of the illness, I hold it to be impossible with any degree of certainty to fix the seat of the disease; the lameness the pain, the rigidity are the same; the cry uttered by the children when adduction is performed, or the bones are crowded together, is not to be depended upon, though the flinching in adults when these movements are made is of some diagnostic value. What one would not expect is often the case, namely—that the lordosis and flexion of the thigh are occasionally met in the extreme forms when the disease is wholly extra-cotyloid, that is to say, outside the joint proper. I remember on one occasion, in conjunction with two other surgeons, examining a child whose limb was flexed and tilted up so much that we thought the shaft must have separated from the head; we came to the conclusion that most extensive disease was present, and that the child would be halt for the remainder of its life, whereas the subsequent development of the case showed that nothing of the kind had

occurred, and that the affection was entirely extra-cotyloid. The child in the end completely recovered without the slightest distortion being left.

The diagnosis of hip disease having been made, the first care should be to warn the relatives that, under the most favourable circumstances, a lengthened period must elapse before recovery can be assured, and to point out to them that, in the course of the malady, variations and evolutions are likely to arise which, in the earlier stages, cannot be foretold. By taking these precautions disappointments are avoided which arise from the surgeon promising too much when first called in. The next step is to secure a light stretcher, whose parts are all fixed, not adjusted to fold up; on this should be placed a tightly-strung wire mattress, or, what I think is better still, a wire mattress stiffened with lathes.*

This bed arrangement, covered with a soft, yet firm, kapok palliase, should be placed in a light room, and elevated so as to be on a level with the window, as the pastime of watching people traversing the street and such like whiles away many a weary hour. These minor matters being settled, the next object of the surgeon should be to remedy the lordosis by subcutaneous section of the offending muscles, and the proceeding must be complete, so that the two limbs are made to lie even with each other.

The patient being anæsthetised, the sartorius is first divided close to its origin from the superior spine of the ilium. If the knife is entered too low down, as the tendinous fibres are very short, the muscle is likely to be incised, and I think this should be avoided, as too early union of the separated ends is liable to happen. Sometimes this simple operation is sufficient, but more generally it will be found necessary to treat the adductors in the same manner. The tendons of the other muscles should next be examined, and if found tense, should at once be liberated. In this manner I have divided the conjoined tendon of the psoas and iliacus at its insertion into the lesser trochanter, and the limb went down at once. The tenotome should be used without fear, and liberally, so as not to leave bands of fascia and tendinous fibres

* I had the pleasure of introducing these mattresses, and whenever an elastic mattress is required for fractures of the thigh, they will be found of service. An ordinary wire mattress is apt, after being used day and night for a short time, to sink in the centre. For fractures of the leg, bed sores, &c., this little inconvenience is of no great consequence; but in hip disease, where it is necessary to keep the body on a level with the limbs, I think these lath mattresses are to be preferred.

undivided, for they *won't* snap when the limb is stretched, and in the end they have to be parted; better rather to sever too much than too little, in order that the thigh may fall as free as possible. A Bryant's double splint should next be adjusted, and a jacket-towel passed over the patient's chest and fastened to each side of the bed, so as to confine the movements of the body. This position, whose only inconvenience is that it is likely to cause nightmare and perspiration, should be steadfastly maintained till the child can be permitted to rise to go out of doors. The motions should be passed on a towel, not in a slipper, and the child should be cleaned by rolling it over on to its side, so that lifting is avoided as much as possible.

There are two advantages gained by this course of treatment. In the first place, the extension that is made by the splint has not to oppose peevish muscular action, and, being made in the same axis as the body, is much more likely to effect the separation of the irritable constituents of the joint than when traction is made on the limb, either hoisted in the air at an angle with the body, or by a weight which is not even sufficiently heavy to counteract the contraction of the sartorius. Secondly, by directly and immediately treating the lordosis if the joint should require further operative measures, one of the greatest hindrances to success is removed. If the thigh is allowed to draw up, as is so often witnessed, it becomes in time next to impossible to restore the limb again to a straight position without sacrificing some portion of the head of the femur, and this is not always, as I hope to show, necessary even in the worst cases.

Twenty years ago, I recollect, when in Devonshire, an excellent surgeon pointing out to the students who followed his practice in the wards, that hip disease, accompanied with abscess, was usually fatal. Now, so much better at the present day is this malady understood, that one hails almost with satisfaction the appearance of such pus collections—they give the key to the situation, for their presence enables one to exactly locate the inflammation, the site of the strumous deposit, or whatever the affection may be, and treat it accordingly.

When an abscess appears, the usual plan is to open and clear it out antiseptically, drain it, dress it and so forth. Now I hold that such a plan is imperfect. Having incised the abscess, its origin should be sought out, and dead bone searched for. If it is found running into the joint itself, we know that nothing but

some further surgical procedure will suffice. If it arises from the neck of the bone time and a Volkmann's spoon are all that are required. To follow the abscess, I find a pair of dressing forceps makes the best probe, as a small track can be opened out by its use. The sinus should be then searched with the fore-finger, and encountering dead bone or sub-periosteal bare bone, the surface should be scraped, all foreign particles removed, and the sac drawn from below. These abscesses, as a rule, are very easily traced out, and one is astonished to find how large a percentage of hip cases are nothing but caries in the neighbourhood of the epiphysis, which, with a dependent drainage and iodoform stuffing, speedily get well. If left to themselves, little chips of bone become detached, and, not being able to escape, form abscess after abscess, the eroding process continuing, till finally the epiphysis becomes detached, and the femur slips up on to the dorsum of the ilium. Now, by the removal of these pieces of decayed bone, the source of irritation is gone, and the hip is at once put into such a state, that recovery is not only possible, but very probable.

But, if on examination, it is discovered that the source of the trouble is seated within the cavity of the joint, or if, without the formation of pus, inflammation has been known to have been in existence for two or three months, and no improvement taken place, in spite of extension, tendon division and rest, what is the next step that should be taken? Are we, as in fact we do, to stand by and placidly watch the joint going to the bad; to such utter destruction, that, under the most favourable circumstances, such permanent deformity, such lameness, must take place as will abate life of one half its pleasures? Are we to stand by and see such mischief going on, and not do anything? If the joint is left to itself, we know exactly what will happen—it has occurred over and over again in every surgeon's practice. When once ositis, strumous or otherwise, has declared itself, it very rarely, if ever, subsides till the articulation is destroyed. If the malady happens to have assumed that particular form of caries, characterised by Billroth as *caries fungosa*—or slow absorption of some portion of the acetabular ring, the head or the neck of the femur—just the same occurs as would happen if pus were present; the shaft is dragged up, and quickly becomes united to the portion of the ilium it comes into contact with, leaving an immovable limb, some two or three inches shorter than its fellow. And we look on this as a recovery; the other alternatives being amputation,

or that most disappointing operation, "resection." And yet, if the same disease was met with in any other articulation, our behaviour, as surgeons, would be wonderfully different. We should open boldly into the joint and freely drain, or we should remove the synovial membrane that happens to be thickened and strumous, search for dead bone, scrape osseous cavities, and so forth, with most happy results. But when we come to the hip, we are told that arthrectomy practically amounts to re-section, and, in ball and socket diathroses, such free treatment is inadvisable. Yet, why a hip should not be examined in the same way as a knee I fail to see, and I think it should be dealt with at once. To my mind it is absurd procrastination to delay, because in the remote past we have in our mind some case that did well without operation. I know that occasionally in a life-time we are surprised at the extraordinary results of expectancy, and it is just on account of these exceptions that it has so long been the practice to "watch and wait." But if we are to base our treatment on phenomenal instances and not on averages, why, there would at once be an end to our art, and we might just as well go back to poultices and diet. Let any surgeon faithfully take note of the hip cases that have come under his care, and he will be surprised how few—I don't care what treatment or treatments he may have adopted—have so far recovered as to be able to walk without lameness. Until quite recent years, I know the grave covered a good percentage of mine, and, with the rarest exceptions, the rest did sadly; and I don't see that anybody else has been more successful.

The operation I wish to describe, which I have, I must admit, only carried out in its entirety in one case, and partially in another case, is thus performed:—Having ascertained to my satisfaction that the cotyloid portion of the joint itself is involved, I make an incision through the integument and soft parts down to the joint, in the same manner as advised in the performance of the operation of excision of the hip, only instead of the knife being carried in front of the great trochanter, the incision is made immediately posterior to that eminence, and in a line with the thigh. The capsular ligament being then exposed, that structure is next divided for about an inch midway between its attachments. The hip joint is now exposed, and if flexed and rotated, the thigh can be fairly examined. If further search is required, two sources are open to the surgeon, either to enter the

joint by grooving the intra-cotyloid cartilage, and the bony ring of the acetabulum at its lower border, or to divide the ligamentum teres with a pair of curved scissors, and then instructing the assistant to acutely flex the thigh, rotate the head outwards, and thus produce a dislocation downwards and outwards. By this means the whole articulation is brought completely into view, and can be examined to the fullest extent, all loose bone or detached cartilage removed, the remnants of the synovial membrane scraped, and strumous cavities erased. If the intra-cotyloid mischief has so far progressed as to necessitate removal of the head of the femur, nothing has been done that will in any way interfere with the success of any resection that may be determined upon. But I hold, that inspection of the articulation should never be deferred till disease has advanced to such an extent as to necessitate excision. It is by our timorous delay that the patient is really hurt. We allow the mischief to progress in the hopes that something may happen, though if questioned, we could not tell what that something should be, which will obviate the necessity of a surgical operation. The articulation having been cleaned, and the exposed parts dusted with iodoform, a reverse movement is made, the limb rotated and then extended, and the femur slipped back into its place. In dislocating and reducing the luxation, care must be taken that the connection of the epiphysis with the shaft is not interfered with—and this is an accident that can very easily take place—it nearly occurred with me as I was withdrawing the Volkmann's spoon, the brim of the instrument caught the edge of the epiphysis, and very nearly injured it. To prevent such a casualty, the tip of the forefinger should be kept on the head of the bone, not only when producing the dislocation, but during the whole time the joint is exposed. Fortunately, my little accident did no harm, though the epiphysis must have received a pretty severe wrench, and from this I am inclined to think that future experience will show that we can take freer liberties with the joint than we at present suspect. As soon as the head is restored to its place, the acetabular ring should be somewhat deeply-grooved for drainage purposes, the most dependent part of course being chosen, and any muscular attachment, that in any way prevents the limb being brought down to a level with the other, divided. An animal suture can be put into the capsular ligament, so as to bring its divided edges together. As for the rest, the dressing depends upon the taste

and experience of the surgeon. Some like iodoform and dry dressings; others may select salicylic wool; for my part, I prefer, for immediate application to the wound, jute, wrung out in a solution of perchloride of mercury and sal-alembroth, and then dried. I fancy this covering is more absorbent than any other.

As regards the splint. For my case I used Bryant's splint at first, and then a small flat rod of iron fitted to the curve of the nates, and held to the body and thigh by a plaster of Paris bandage. The advantage of such a splint is that it not only holds the parts absolutely immovable, but it can so easily be adjusted without interfering with the incision; it is also very cleanly.

What becomes of the hip-joint thus inspected? In the case when I performed this operation, although this instance was a very bad one, both on account of the excessive caries that existed, and also on account of the extreme lordosis, no fixture of the joint has taken place at all. The boy can walk fairly well (it is only some six months since I operated), and will, I am confident, improve in his gait. There is some shortening (half an inch at the outside), and one sinus has not closed—this I ought to have split; and I also grooved the head of the bone—an unwise and unnecessary proceeding, as I see now. But the lad can sit down squarely, or very nearly so, on a chair. On the whole I am pleased with the result of this operation, more so as it was a first attempt. Of course, like everything else, if this operation comes at all into vogue, future experience will teach a good deal, but if ever the limb of a child was saved it was this one, though the case was a most unfortunate instance for a first experience, on account of the length of time the affection had existed. But supposing on opening the articulation it was found that the parts were so diseased as to require re-section, then the position is in no way weakened; however, I certainly should attempt to procure a better ankylosis than that usually obtained, by clearing out the cotyloid cavity, removing as far as possible all traces of ligament and cartilage, and adopting a modification of Mr. Fitzgerald's method of treating ununited fractures with acetic acid. It is surprising what an effect this application has in these instances—that, we Melbourne surgeons, all know—and I should think its action would be just as useful in cases where nothing remains but to remove the head of the bone. Acetic acid seems to act by dissolving, or in some way breaking up, the imperfect

callus surrounding the ends of the broken fragments, and I am inclined to think it would act in a similar manner on the cartilage of the acetabulum. I think this suggestion worth a trial by some surgeon attached to a hospital, for in private practice it is very difficult and dangerous to indulge in these little surgical experiments.

Dr. BENNIE referred to the faulty construction of the splint, which passed current in Melbourne as Thomas' splint. The usual custom followed, in the fitting of Thomas' splint, was the sending of the patient to the instrument makers to get fitted, and the usual result was that the patient was applied to some splint which the makers happened to possess. Amongst the points which must be attended to were the following:—The splint must be fitted when the patient's back is straight, and then the leg can be straightened afterwards. The splint can be altered in shape after it has been fitted by the proper use of the powerful wrenches which Thomas uses. Dr. Bennie had found that cases do well when properly fitted with Thomas' splint.

Dr. MOORE was present when Dr. Webb operated. For an original operation, the case was a bad one. It was far advanced, there was bone disease, and there was danger of tearing away the epiphysis. The posterior incision used is very serviceable. In this case, a few days after the operation the child began to improve, the discharge lessened. The one sinus left, probably owed its origin to the existence of some portion of diseased tissue which had escaped removal. The obvious indication in the late stage of the disease is to remove everything which can keep up suppuration, bone, synovial membrane, cartilage, everything. If ankylosis should follow, the shortening would be less than that which follows excision.

Mr. WEBB, in reply, said no splint had disappointed him so much as Thomas'. He believed that hip cases were rarely synovial, and consequently treatment by splints was usually ineffectual.

EXHIBITS.

Mr. J. H. WEBB then exhibited "Two Cases of Psoas Abscess," the remarks about which we are obliged, by want of space, to hold over for the present.

Dr. J. W. BARRETT then exhibited the following cases:—

1. *Ulceration of the Hard and Soft Palate—Necrosis—Probably Syphilitic.* A. B., aged 24, married for three years. Has one child, and has had one miscarriage. Has two brothers and four sisters living, and one brother dead. Seven or eight years ago her mouth was affected, blisters forming under the tongue. Two years ago the roof of the mouth began to be affected, and the condition which exists at present began to develope.

Present condition—The roof of the mouth is studded with sinuses which lead down to the hard palate; in some cases the bone is roughened. A spicule of bone came away two or three months since. The soft palate has been largely destroyed; at present no active ulceration exists. The vision is defective, right eye V. = $\frac{6}{18}$, left eye V. = $\frac{6}{9}$; both pupils dilate well. On the middle of the anterior surface of both lenses there is a patch of pigment. On the right cornea there are peripheral nebulae.

2. *Two Cases of Strabismus Illustrating the Spectacle Treatment.*

(a) A case exhibited by kind permission of Dr. Bowen, who had performed tenotomy on the internal rectus of the squinting eye, with partial success. The constant use of glasses, subsequent to the operation, had completely removed the remaining squint. At present there is no squint while the boy wears his glasses, but it returns instantly they are removed, and disappears the instant they are re-applied. (b) A child, aged four, who began to squint with the right eye at the age of three. Eight months after the appearance of the squint, the angle was 35° in. The hyperopia was corrected, and the glasses worn constantly. At present, six months later, there is slight apparent divergence whilst the glasses are worn. The squint reappears to some extent the moment the glasses are removed, but disappears the moment they are replaced.

Dr. BARRETT said that the special interest of the latter case lay in the fact that the constant use of glasses had produced an improvement of 35°, while the maximum effect producible by simple division of one internal rectus is only 25°.

Dr. BOWEN said that he had completely given up dividing both internal recti at the same time, since he had found that in some cases the eyes diverged subsequently. He found that division of one rectus, and the subsequent use of glasses, was a very efficacious mode of treatment. The point of unusual interest in these cases, was the instantaneous return of the squint when the glasses were removed.

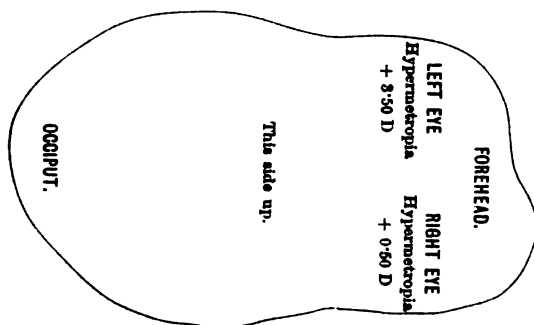
Dr. BARRETT said that in fifteen per cent. of strabismus cases, spectacles produced no improvement whatever, and it seems impossible to say why the treatment fails in these cases.

Mr. J. H. WEBB then exhibited a "Pelvis," removed from a patient who had been under his care at the Melbourne Hospital. It showed a complete separation of the pubic symphysis; also a separation at the left sacro-iliac joint. There was no fracture.

The history of the case was as follows:—G. F., æt. 20, was admitted into the Melbourne Hospital on the 24th January, 1889. He was then somewhat under the influence of alcohol, and was unable to give any account of himself. He was suffering from shock and loss of blood. There was a large lacerated and contused wound on the inner side and upper part of the right thigh, exposing the adductor muscles. The perinæum was ruptured, and the scrotum was torn, exposing the lower part of the right testicle. The urethra was found to be ruptured about the middle of the perinæum. A catheter was passed into the bladder, and upon it Mr. Webb cut down on to the ruptured urethra. He passed a soft rubber catheter into the bladder through the perinæum, and sutured the external wound; dressed with iodoform and gauze. The patient sank, and died in about 30 hours.

Dr. J. W. BARRETT exhibited a "Diagram and Chart of the Skull of a Man aged 21," who was hyperopic (+ 3.50 D.) in the left eye, and nearly emmetropic (+ 0.50 D.) in the right.

HORIZONTAL SECTION OF HEAD.



Dr. BARRETT said this case might be regarded as an arrest of development of the eye, of a portion of the skull, and probably of a portion of the brain. The hyperopic condition of the eye was distinct physical evidence of this want of development.

Dr. J. W. BARRETT then exhibited the Burroughs, Wellcome Steam Atomiser, and the meeting terminated.

British Medical Association.

VICTORIAN BRANCH.

ANNUAL MEETING.

Wednesday, 30th January, 1889.

(Hall of the Medical Society, 8 p.m.)

The President, Dr. ROWAN, occupied the chair, and the following members were present :—Drs. Ralph, Henry, Joyce, W. Barker, Lynch, Flett, Cobb, Burton, Syme, Hewlett, Springthorpe, Le Fevre, Neild, Cutts, Shields, Anderson, R. H. Fetherston, Simmons, Maloney, Woinarski, and Balls-Headley. Mr. Rudall wrote, regretting his unavoidable absence.

The minutes of last annual meeting were read and confirmed.

Letters were read from Drs. Pinnock and Whitcombe, pointing out that the signing of the ballot papers by country members, as requested on the circulars issued to such members, would defeat the object of the ballot. The Honorary Secretary explained that, owing to an inadvertence, an error had been made in the drafting of the circular. The intention, of course, had been not to ask members to sign the ballot paper, but for them to forward a sealed ballot paper to the Secretary, who would hand it sealed to the scrutineers. The Secretary, would, for purposes of verification, initial the ballot paper before forwarding it to the country member, and initial the outside again on its return; or, as suggested by Dr. Pinnock, the sealed ballot paper could be forwarded by the member direct to the Chairman of the meeting. Under the circumstances he would, if the meeting permitted, remove all traces of identity from the ballot papers received, and hand them over to the scrutineers, without glancing at their contents. It was agreed that this course be adopted.

NEW MEMBERS.

The election was announced of the following new members :—C. J. Routledge, L.R.C.S.I., Trentham; F. D. Bird, M.B., M.S. Melb., Collins-street; O. L. M. Abramowski, M.D. Berlin, Mildura; W. Beattie Smith, F.R.C.S.E., Ararat.

HONORARY MEMBERS.

The election was announced of the following honorary members :—G. Graham, M.D., for services to the Branch since its inception; C. Candler, for services in the cause of medical science in the colony.

REPORT OF THE COUNCIL FOR THE PAST YEAR.

The Honorary Secretary then read the following Report :—

Your Council upon this, the expiration of its term of office, has pleasure in reporting that the past year has been one of great activity and considerable progress. Twenty-seven new members have joined the Branch since last annual meeting, making a total of 130 members—the largest number connected with any Colonial Branch of the Association. Your Council hopes, however, that as there are still numerous unattached members of the Association in the colony, and many outside practitioners who only require to have its advantages placed before them to secure their adhesion to the Branch, the coming year will witness a still greater increase in the roll of membership.

During the year the Council has met eleven times, the attendances of members being as follows :—Dr. Rowan 7, Dr. Fishbourne 5, Dr. Graham 4, Dr. Springthorpe 10, Dr. Neild 7, Dr. Le Fevre 6, Dr. Henry 6, Dr. Rudall 7, Dr. Meyer 5, and Dr. Willmott 1. The Branch has held its ordinary meetings each month with the exception of December, when the meeting was postponed owing to the holidays. The March meeting, however, was adjourned owing to inclement weather, and the November meeting was merged into a combined meeting with the Medical Society of Victoria, for the special purpose of considering the question of practice by unqualified men.

The record of the work performed by the Branch during the year is a satisfactory one. The papers submitted, and the specimens exhibited, have been both numerous and interesting ; whilst the attendance of members has shown a gratifying tendency to increase, and the discussions have not unfrequently been animated and instructive. The Council, recognises, however, that there is still room for improvement in these matters, and would again urge upon members that it rests with themselves to make the ordinary meetings of the Branch personally attractive, as well as professionally useful.

The following is the list of papers read at the ordinary meetings of the Branch :—

- E. W. Anderson, M.D., "Notes on 500 Consecutive Cases of Midwifery at the Women's Hospital," "Remarks on some Cases of Ante-partum Hæmorrhage," "Anæsthetics, with special reference to Midwifery and Obstetric Practice."

- W. H. Barker, M.R.C.S., "Our Lunatic Asylums."
T. J. Barr, M.R.C.S., "Antipyrin in Typhoid Fever."
W. S. Flett, M.D., "Poliomyelitis Anterior Sub-Acute vel Chronica."
W. Gardner, M.D., "Case of Extirpation of the Larynx."
J. de B. Griffith, M.D., "The Advantages of Blood-letting in Acute Lung Disease."
F. M. Harricks, L.R.C.S.I., "Case of Cerebellar Tumour."
J. E. Neild, M.D., "Exceptional Case of Chloroform Poisoning."
T. S. Ralph, M.R.C.S., "Further Observations with the Microscope on the Blood in Typhoid Fever."
T. Rowan, M.D., "A Few Cases of Extirpation of the Uterus, with remarks."
J. T. Rudall, F.R.C.S., "Some Remarks on the Treatment of Hæmorrhage after Wounds of the Hand."
C. S. Ryan, M.B., "Operative Treatment of Nerve Injuries."
J. W. Springthorpe, M.D., "Notes on Some Cases of Beri-Beri," "A Toxic Dose of Atropine," "Nitroglycerine in Vascular Spasm," "Faradisation in Hysterical Spasm," "A Case of Cerebral Tumour."

The following members have exhibited specimens and other objects of interest:—Drs. Rowan, Joske, Grant, Black, Fulton, R. H. Fetherston, Anderson, Henry, Griffith, Mollison, Maudsley, and Springthorpe.

The Council hope that other members will follow the excellent example set them by these gentlemen. Such exhibits form one of the most attractive portions of the work of the Branch, and the Council congratulates the Branch on the number and character of its exhibits during the past twelve months. In addition, the well-known firms of Messrs. Burroughs, Wellcome and Co., Francis and Co., Mayer, Meltzer and Jackson, and Messrs. Roche, Tomsitt and Co., have, upon different occasions, forwarded for the inspection and use of members, specimens of new drugs, preparations, instruments, &c., for which the Council hereby tenders them its thanks.

During the year, several matters of great interest have engaged the attention of the Council and of the Branch.

The Branch has accepted the kindly offer of the Committee of the Medical Society of Victoria, and, for the past six weeks, has

held its ordinary meetings in the more convenient and commodious hall of that Society. Your Council would place upon record its appreciation of the cordial manner in which the Medical Society met the overtures of the Council, and the kindly feeling which prompted its generous action. The thanks of the Council have already been conveyed to the Committee of the Medical Society, as well as to Dr. Neild for his special exertions in the matter; and to the Council of the Royal Society for the use of the hall of the Society during previous years.

The great question of lunacy reform has, as in previous years, been prominently under the notice of the Branch. At the September meeting, after a paper by Dr. W. H. Barker, and a discussion, which was fully reported in the *Journal* and the daily press, a resolution was passed protesting against the attempt to adopt the cottage system as the exclusive mode of housing the insane. The same view has been taken in an able paper read at the recent Congress by Dr. Manning, Inspector-General of Asylums in New South Wales.

The disabilities under which the profession labours, owing to defects in the "Medical Practitioners' Act 1865," have been under careful consideration. At the instance of Dr. Youl, President of the Medical Board, a conference was arranged between the Branch and the Medical Society, and as a result, the Councils of the two bodies have been requested to draft an amended statute, to be submitted to the two societies at an early date for their consideration. It is hoped that the outcome will be an amendment in the present Act, adequate to the requirements of the case.

The past year has also witnessed additional legislation in matters relating to the public health. Without expressing an explicit opinion upon the merits of "The Public Health Act 1888," "The Lunacy Amendment Act 1888," or "The Inebriate Asylums Act 1888," your Council cannot fail to express its regret that matters of such public importance were deferred by the Legislature until their due discussion became an impossibility, and their present form is the result simply of a hurried compromise, in which matters of the utmost importance were sacrificed. Such a catastrophe furnishes additional evidence that the department of public health, as at present constituted, has not that broad base and distinct existence which its importance demands, and which are necessary for its due recognition.

The distinguishing feature of the *annus medicus*, however, has been the meeting in Melbourne of the Second Session of the Intercolonial Medical Congress. The Council congratulates members of the Branch, and of the profession generally, upon the unqualified success of the Congress, which has marked an era in the history of Colonial medicine. It congratulates the medical profession upon the great stimulus to *esprit de corps* that must follow such a gathering, upon the numerous contributions of permanent value which will be found within the printed transactions, and upon the good public work accomplished by the passing of valuable resolutions upon necessary reforms in our health laws and insanitary surroundings.

Upon the motion of Dr. Cutts, seconded by Dr. Shields, the report was adopted.

TREASURER'S STATEMENT.

The Acting Hon. Treasurer, Dr. SPRINGTHORPE, explained that owing to the severe illness of Dr. Graham, a properly audited statement had not been procurable. He had gone carefully through the accounts, however, and the meeting might accept his statement that after receiving unpaid subscriptions and paying all outstanding accounts, there was a balance to the credit of the Branch of some £27. The income of the Branch was 8s. from each member, the remaining £1 3s. going to the Journal account. At 120 members, this would amount to £48. The year's expenses were made up of printing expenses, hall rent, the purchase of home drafts, and losses on exchange, with collector's fees, which last year reached the large total of £5. Altogether, however, the income should be always considerably above the expenditure.

On the motion of Dr. Neild, seconded by Dr. Le Fevre, the Treasurer's statement was adopted provisionally, subject to confirmation at the next general meeting.

ELECTION OF OFFICE-BEARERS FOR THE ENSUING YEAR.

Drs. Balls-Headley and Cutts were appointed Scrutineers. In due course the Scrutineers certified to the President that the following members had been chosen to act upon the Council for the year 1889 :—Drs. J. W. Y. Fishbourne, G. Le Fevre, H. C. Maudsley, F. Meyer, J. E. Neild, T. Rowan, J. T. Rudall, A. Shields, J. W. Springthorpe, and G. A. Syme. The new Council then retired according to custom, and upon its return, the

retiring President, Dr. Rowan, announced the election of the following office-bearers for the year :

President—J. W. Y. Fishbourne, M.B.

Vice-President—Hon. G. Le Fevre, M.L.C., M.D.

Hon. Treasurer—J. W. Springthorpe, M.D., M.R.C.P.

Hon. Secretary—H. C. Maudsley, M.D., M.R.C.P.

The Auditors, Drs. Haig and W. Barker, were re-appointed.

The retiring President congratulated the gentlemen so appointed, and, in the unavoidable absence of the new President, vacated the chair in favour of the new Vice-President, Dr. Le Fevre.

Dr. Le Fevre took the chair amidst applause, and thanked members for the great honour conferred upon him—a honour which he valued most highly—and one which he would do his utmost to merit during his year of office. He then called upon the retiring President to read his address.

THE PRESIDENT'S ADDRESS.

GENTLEMEN,—I have to congratulate the Victorian Branch of the British Medical Association upon the satisfactory position it occupies at the present moment. It is now in the tenth year of its existence, and it has, I may say, necessarily, reached a stage in which permanency is assured. It has passed through the customary fluctuations incidental to all new societies, and may now be considered to be resting upon a basis, solid enough to warrant the expectation of lasting prosperity.

During the past year, as the report of the Council shows, there has been an agreeable maintenance of steady interest. The meetings have been fairly well attended, there has been a good supply of papers, the discussions have evinced an increased interest in the work undertaken, and there have been the most harmonious relations between the members. Especially gratifying is it to record, that negotiations with the Medical Society of Victoria have been established on the most friendly basis. Not only now do we hold our meetings in the hall of that body, but the two Societies have met together in conference, and there is not a shadow of unfriendliness between the two institutions. Practically, the two Societies are united. They preserve, completely, their individuality, and it is not likely, and perhaps not desirable, that an amalgamation, beyond this coalescence, will be brought about. But both in thought, in feeling, and in purpose, the two are one ; and, although they flow in different currents, they run

parallel and close together, and no sentiment other than that of entire satisfaction is felt at the union which has taken place. The junction may help to refute the belief, erroneously entertained and not seldom expressed, that medical men, and especially medical societies, are by their nature in antagonism. The Society and the Branch Association number, collectively, about three hundred persons; and, when it is declared, as I now declare, that not one word of bitterness has been uttered at any meeting of either body during the past twelve months, any feeling to the contrary of a belief that we dwell together in harmony, may be abandoned as the opposite of absolute truth.

Of the condition of the profession, generally, in the colony, I feel warranted in speaking very hopefully. A good understanding generally prevails. There are private and personal differences of course, just as there are differences in every section of the community; but in the main, we work cordially together towards a common end. We may not be all equally high-minded, and equally earnest in striving for an ideal perfection, but, as a whole, I think we deserve well of the outer world, and do not merit the taunts sometimes flung at us, that, as doctors, we necessarily disagree.

The Intercolonial Medical Congress which was recently held in Melbourne, and which proved so signal a success under the presidency of Mr. Fitzgerald, represents an important fact in current medical history, upon which we may all congratulate ourselves. Of the abstract value of such assemblages there can be but one opinion, but of the particular value of this one, too much in approval cannot be said. For it not only resulted in the production of a large number of interesting essays on all branches of medical science, some of them displaying great originality and depth of thought, but it brought together representatives of the profession from all parts of the widely separated Australian provinces. Men met face to face, who although knowing each other for years by repute, and even by correspondence, had never met before, and, but for this opportunity, would never have met at all. In this way a large amount of good feeling and personal regard was evoked, and the general effect of the gathering will be greatly to strengthen that sentiment of confraternity, which the practice of a common vocation ought to bring about, but which the lack of a personal knowledge of one another often impairs.

The condition of our hospitals and the changes occurring in their administration, at all times occupy a good deal of professional

as well as public attention. The Melbourne Hospital, as the parent charitable institution of the colony, appears to have enjoyed during the year, a time of comparative calm. The outcry against its insalubrity has happily ceased ; there has been no septicæmic outbreak, no epidemic of erysipelas, no disturbance of amicable relations in the Medical Staff, no revolt in the Committee. The Superintendent and Secretary is going to Europe on a well-earned holiday ; the Chief Dispenser has retired after 35 years of hard work, and his second in command reigns in his stead. The Alfred Hospital has suffered the calamity of a fire, and everybody is philanthropically wishful to contribute something towards the cost of rebuilding the burnt wing. At the Children's Hospital there is, as there always has been, entire harmony, and at the Women's Hospital there has been an addition of four to the honorary staff, making the whole number now eight. Here, however, there has been much ferment in the management, on account of the delay in making use of the new portions, which, in honestly-judging minds, are not, after all, models of suitability for the purpose for which they were designed. The Medical School of the University is still in an increasingly prosperous condition. The students now number nearly 300, of whom a section are young women. The difficulties raised in connection with women-students—difficulties which were raised *for*, and not *by* the women-students themselves—have been satisfactorily disposed of, and they are pursuing their studies undeterred and undismayed by the obstacles, at one time claimed to be insurmountable. The clinical teaching, as determined upon by the Council, appears to be working satisfactorily, both at the Melbourne Hospital and the Alfred Hospital, and the College of Pharmacy supplies pharmacological practice to the satisfaction of the Medical Faculty. The alleged increasing strictness of the examinations has been occasionally complained of by unsuccessful candidates, but, upon the whole, fair satisfaction is given.

The periodical medical literature of the colony as represented by the *Australian Medical Journal*, under the editorship of Dr. Syme and Dr. Moore, holds well its place, and the *Australasian Medical Gazette*, projected and commenced in Melbourne, but published in Sydney, appears to maintain well its good reputation. The Medical Students' Society has its own special organ, the *Speculum*, which probably supplies a want created by those who brought it into being. And of the Students' Society it is certain

that it deserves all praise for the zeal and earnestness with which it is conducted.

At no time, probably, was the subject of sanitation so much in men's minds as at the present epoch. There was an era, and that not so very distant from the present, when many diseases were regarded as inevitable, if not necessary, and no provision therefore was made with a view to their prevention. But the extraordinary progress which has been made in investigating the causation of disease, has resulted in the conclusion that it is possible entirely to eradicate them by destroying the agencies which encourage their growth. The medical profession, therefore, all over the world, is now steadily engaged in proclaiming the evangel of prophylaxis, and we, in Victoria, are not behind in this crusade against disease-factors. But we fight against over-powering numbers; and we have as our formidable antagonists, ignorance, prejudice, indifference and greed. Habit, mode of life, indolent abundance, and unscrupulous rapacity, are more powerful than either intelligence, law, or friendly warning. Health statutes may direct or threaten, and boards of health, central and local, may inspect and report, but the evils of insanitation go on unhindered all the same. The press, with the very best intentions and the most sincere purpose, I am glad to say in the most emphatic language, shows the danger and the wickedness of hygienic neglect; but the neglect continues. Able pens may point out that a whole City is a vast fever-bed, breeding milliards of microbes at every moment, everyone of them capable, in the mysterious process of pathogenesis, of causing disease and death. Nevertheless, the septic ferment simmers on; the seething mass of filth is flung out at the very doors, blocking the way into the dwellings; it is heaped up in multitudes of mephitic middens; it bubbles in pestiferous pools; it runs black and slab in noisome streams along never-cleansed gutters; it is blown as dust into the air and swallowed and inhaled in involuntary nauseous draughts; it mixes with food and drink; it covers the skin as with a clinging garment. It is with us, of us, about us, and it kills us with a certainty there is no escaping. And yet, if we chose, if we were of one mind, if we stood shoulder to shoulder in the fight against this infinity of mischievous littleness, we could vanquish it. But, unhappily there is no union, and therefore, there is no power to battle with it. Legislators languidly pass emasculated statutes, which administering central boards find unworkable, because local

boards prefer to regard their own sordid interests, rather than the good of those by whom they are surrounded. It destroys one's faith in the possible regeneration of mankind, to read of some breeder of disease, himself, say a municipal magnate, openly defying the law by persisting in maintaining a fever-factory, backed by the well-understood collusion of the local police, and virtually encouraged by the nominal penalties imposed by a sympathising magisterial bench. With larger aims and with an infamy of its kind colossal, I may allude to the action, happily for the present defeated, of that syndicate, who should be "damned to everlasting fame," prepared, without scruple or compunction, to poison half a million of citizens as the alternative of their exacting a rapacious levy from the Government. In some countries, that syndicate would be summarily dealt with other than by process of law. In this community of elastic morals, their conspiracy is looked upon as a dexterous stroke of commercial policy, rather than a scandalous act of predetermined wholesale homicide. It excites little indignation, because it is only one among the many infamous acts committed by land syndicates, who lay out streets upon dung hills; who build houses in stygian puddles; who consider drainage a prejudice, sunlight a delusion, and ventilation a weakness to be treated with derision. And yet, every medical man has daily experience of the effect upon persons living and literally rotting in the stifling wooden boxes, that during the last half dozen years have been run up in thousands on these filthy fermenting raised sites; bogs to begin with, cess-pools in their intermediate stage, disease germ-geysers when piled to the required level with the multitudinous abominations, vomited out of noisome scavenge drays and revolting night-carts. When I hear the boasts not seldom made of our "Marvellous Melbourne," our social progress, our great intelligence, and our educational completeness, I bethink me of some poor creature dying of septic fever, caused by the absorption of the bacteria, which, rising like an infernal host out of the poison ground below the bed upon which she lay, killed her as certainly as if she had been struck down with a crow-bar, or stabbed to the heart with a butcher's knife. If ever a city rendered itself liable to be plague-stricken, it is this City of Melbourne. Every day, mention is made of some crying insanitary wrong requiring removal; but the cry is unregarded. It is so common a cry that it ceases to occasion alarm, and hardly claims attention. I am compelled, therefore, to say, that the system which remits

sanitary inspection to local boards of health is a mistake. Both inspection and report should be made by expert officers, responsible only to a central authority, and the punishment of offenders against the sanitary laws should not be at the option of local magistrates, who possibly cannot, and who certainly do not, act other than partially. Taking a larger view of the public health question, however, I think there can be no doubt about the necessity of there being a health department, wholly independent of any other department, and free from any ministerial control ; as free, in fact, as the Supreme Court is free from Government influence. Such a vital alteration of the present system, would, no doubt, require great consideration, but it will have to be made some day in the not distant future.

The appointment some months ago by the Government of a commission to investigate the sanitary condition of the colony should furnish valuable means for future legislation. The evidence already given before this body has, in some instances, been of a startling kind, quite sufficient indeed to justify all the imputations of incompetency or venality brought against those whose duty it is, but whose interest it is not, to suppress insanitary wrongs. The report of this commission will be anxiously looked for, and from the character of the gentlemen composing it, the information and recommendations will be sure to be of exceptional value.

I cannot discuss this subject of sanitation without urging the great need of including in the curricula of all schools, state as well as private, instruction in the principles and the laws of health. The necessity of such teaching will be apparent when the general practice of the whole community is borne in mind. Also special instructions should be given to those who may be appointed inspectors in the way I have suggested. Further, architects, surveyors, builders and skilled workmen should be obliged to pass an examination and take out a licence in sanitation ; and penalties should be inflicted upon all persons, connected with building operations, who committed any offence against either the natural or the statute laws of health. Only in this way would the syndicate fiend be effectually exorcised and subdued.

The anomalous condition of the law relating to the practice of the medical profession has come very prominently under our consideration during the last few months. I need hardly say that, for many years, the ineffective provisions in the Medical

Practitioners' Statute have been a source of dissatisfaction not only to ourselves, as a profession, but to the intelligent section of the public who are absolutely at the mercy of any impostor, however ignorant, who chooses to call himself a medical man. The particular occasion, however, which prompted a renewed discussion of this subject, was the improper, and indeed I may say the indecent, endeavour of a member of the Government, to force the Medical Board to register a person who, not having complied with the conditions constituting eligibility for registration, was necessarily unqualified, and therefore practising illegally. The determined stand taken by the Board was the subject of debate at one of the largest meetings of the profession ever held in Australia, this being the combined assemblage of the Society and the Branch, and the protest then made was emphatic enough to convince any minister, other than the very wrong-headed visionary who unfortunately happens to be Chief Secretary of Victoria, that a blunder had been committed. The undignified attitude assumed by Mr. Deakin was accentuated by the circumstance of his subsequently refusing to permit the police to institute proceedings against illegal practitioners, and contemptuously describing the profession as a "trades' union," which it was no business of his to uphold. It would be difficult to quote an instance more signally illustrative of the insolence of office than this action of the Chief Secretary, but the impolicy of the proceeding was obvious and the insult to the whole profession will hardly be forgotten during the forthcoming elections. Meantime, it may be remarked that, considering the vast amount of unnecessary and indeed mischievous legislation of which every session of our Parliament furnishes examples, it is the reverse of encouraging to feel that the law of medical practice should be so inoperative and so unjust, and that, while the curriculum of medical education becomes more and more exacting, the recognition of charlatans increases. It is, practically, open for any person to exercise the calling of a physician or surgeon, and the result is that the community swarms with pretenders of every kind. The newspapers are filled with their impudent advertisements, and walls and hoardings are covered with their pictures. The public accept these imposters at their own appraisal, and now that the Government has given them an indirect encouragement, their numbers may be expected to increase continually. If the measure of the intellectual quality of a community be the readiness with which it recognises charlatanic

imposture, then the mental level of the public of Victoria must be exceedingly low, for quackery thrives here like a noxious weed upon a litter-heap, and unfortunately recognition of the quack is by no means limited to the confessedly ignorant and uncultured. Persons, in other respects intelligent and presumed educated, resort to these medicine-mongers and attach much more importance to their empirical dicta, than to the opinions pronounced by even experienced practitioners. Indeed there is a fixed belief in the minds of many persons, that the quack is a heaven-inspired seer, and such illogical individuals are always ready with the foolish taunt, that the qualified practitioner wishes to suppress the charlatan, because he is afraid of his skill and jealous of his success. This belief is apparently shared by the Chief Secretary.

The provision made, and to be made, for nursing and treating the insane of this colony, has occupied very much the attention of the profession during the past year; and, considering the very large proportion of the insane in Victoria, a proportion which is steadily increasing, the various questions therefrom arising clearly demand special attention. The point more especially under discussion has been that relating to the kind of buildings most suitable for their accommodation. A popular cry has been raised against what is called the "barrack" system. Large buildings, it is insisted, are objectionable, and what are called "cottages," are preferable, and therefore, indispensable. Certain journals, and certain writers in those journals, have, with possibly benevolent intentions, chosen, from time to time, to denounce the barrack, and to extol the cottage, without any adequate knowledge of the discriminating method proper to be pursued; without information as to asylum practice in other parts of the world, and without bearing in mind that different forms of insanity demand different modes of treatment. These authorities have laid it down as incontrovertible, that insanity is incurable in a large building and remediable in a small one. It has probably come as a surprise to these persons, that experts, having the knowledge and, therefore, the right, to express an opinion on insanity, have strongly condemned the adoption of any plan not providing for large rooms, where considerable numbers of the insane can be grouped together, and brought under comprehensive observation. That cottages are very well suited for properly selected cases, no one will deny; but that many cases would recover less certainly in small isolated buildings is manifest to any well-informed medical

man, having even only a rudimentary knowledge of the subject. What is really required in Lunatic Asylum accommodation in Victoria is, not so much a difference in the plan of the buildings, as their enlargement and extension. For some years, the medical officers of our hospitals for the insane have continually besought the Government to relieve the over-crowding in them ; and there is no doubt, that to such over-crowding are due the high rate of mortality and the difficulty of adopting a really scientific method of treatment. In claiming for large buildings a certain measure of preference, however, I by no means desire to commit myself to the unconditional approval of the arrangements of all of those now existing. The progress of sanitation during the last twenty-five years has been so great, that hardly any public structure put up, say in 1860, would be pronounced consonant with contemporary requirements. But there is surely no need to abolish what could readily be adapted to present needs ; and although, probably, all the buildings at Yarra Bend might advantageously be pulled down, those at Kew, Beechworth, and Ararat, could well enough be altered to suit existing requirements. The Lunacy Statute which has been part of the legislation of the past year, was, to some extent, the outgrowth of the report of the Lunacy Commission which sat three years ago, under the presidency of Mr. Zox, to whose personal efforts, no doubt, much of the valuable information therein contained was due. This statute is, no doubt, to some extent an improvement upon its predecessor, but it is so far from being perfect, that its amendment at an early date is inevitable. Especially necessary is it that the status of the medical officers of the asylums should be improved, and I say this, not alone in the interests of those members of the profession, but with a regard for the welfare of the unfortunate creatures under their care. I regard it as of consequence to secure for these offices gentlemen of special knowledge and experience, and having secured them, to make it worth their while to retain their position ; whereas the fact is, there is now absolutely nothing to tempt them to stay. For their remuneration is scanty, their authority is *nil*, and they are cruelly overworked. I am obliged to say, therefore, that no good man will remain in charge of a Victorian lunatic asylum any longer than he can better himself ; and we have only to remember the continual changes that go on in the medical staff of these institutions to be assured of the truth of this assertion.

I am happy to say that the list of our members has considerably increased during the year, and that there have been no deaths. The profession in this colony, however, has suffered a serious loss in the decease of Mr. W. H. Campbell, and Mr. W. G. Howitt, both of whom were deservedly held in high esteem by all who knew them. They belonged to the early days of Victoria, and though Mr. Campbell was considerably the senior of Mr. Howitt, they were severally old colonists, of whom now very few remain, if we restrict the title to those pioneers whose advent hither was anterior to the gold discoveries.

Much might be said of the progress of medicine in the older countries of the world. Its records, however, are inscribed in the periodical literature of the time. The diligent workers in the vast field of medical science are continually refuting the imputation—as untrue as it is foolish—that it is unprogressive, if not retrogressive. The exact opposite of the proposition is the truth. It is essentially a science of progress in all its departments, as those who are old enough to compare the practice of medicine of to-day with the practice prevailing thirty years ago, can abundantly testify. And it is our justifiable boast and our pride, that every real discovery made is a step forward. We are always endeavouring to perfect the rational methods of diagnosis and treatment, and although there are from time to time, apostasies and heresies, whose very irrationality is to many minds their recommendation, the grand science, discarding error, marches steadily on, its cultivators always aiming at something higher and better and hoping to achieve it. The question, however, which seems to have occupied the attention of our European brethren chiefly during the past year, is the fatal illness of the late Emperor Frederick of Germany, and the position taken by Sir Morell Mackenzie in his conflict with the German surgeons. Perhaps the subject is of a kind which, at this long distance from the scene and the circumstances, we cannot adequately judge. But it is at least significant that the Royal College of Surgeons of England should have pronounced an opinion condemnatory of the course that this no doubt eminent specialist has seen fit to pursue. A body so constituted as this College is, could hardly err in its deliberate judgment, and it would, I take it, be a kind of presumption to question the judicial authority of its pronouncement.

And now, in resigning the presidency of this Association to my successor, let me thank you for the honor you did me a year ago,

in electing me to the office. I would also acknowledge the courtesy and consideration invariably shown to me on the various occasions when we have met together, and the personal goodwill I have experienced at the hands of all my fellow members. It will ever be to me a pleasant memory that I have enjoyed the distinction and privilege of filling the principal office in the Victorian Branch of the British Medical Association.

Dr. CUTTS, as the oldest ex-President present, moved that a hearty vote of thanks be given to Dr. Rowan for his address, so admirable both in substance and in form. Dwelling upon certain points, he was especially pleased at the good feeling now established between the Branch and the Medical Society. There was room for both, and emulation would do both good. Not only had the recent Congress established a good understanding throughout the profession at large, but it would create a very favourable impression at home and on the Continent. It would raise us in the European scale scientifically, and we wanted such recognition amongst our recognition from a sporting and blowing point of view. In sanitation, it was creditable to the profession that it always led the way, and acted disinterestedly for the public good. Since, however, the Government could not legislate above general intelligence, we should not be too severe upon it for defect in our sanitary laws. Nor need we magnify the insanitary state of "Marvellous Melbourne," which really compared favourably with many large Continental cities, though it was not so sanitary as from our climate and advantages we had a right to expect. He thanked the ex-President for an admirable address.

Mr. HEWLETT, in seconding the vote of thanks, endorsed the remarks which had fallen from Dr. Cutts in reference to the address. The address was an excellent one in every particular.

The CHAIRMAN put the motion, which was carried with acclamation.

In reply, Dr. ROWAN returned his sincere thanks to members for their kindly recognition of his efforts. During his year of office he had done his best, and trusted that he had given a good account of his stewardship. He would always remember his Presidential year with feelings of pride.

NOTE OF CONDOLENCE.

Dr. NEILD expressed the regret, which he felt sure was shared in by every member present, that Dr. Graham had been obliged to

resign his position as Hon. Treasurer to the Branch, owing to the extremely unfavourable state of his health. As an old friend of 35 years' standing, he deplored the calamity which had overtaken him. Dr. Graham had occupied the position of Treasurer since July 1884, to the entire satisfaction of the Branch. In recognition of his long and valued services, the Council had already elected him an Honorary Member of the Branch, but it was only appropriate that his fellow members should desire to give him some token of the esteem in which they held him, and show their sympathy with him at the present juncture. He would move, therefore, "that this meeting of the Branch records its great regret at the circumstances which have caused the retirement of Dr. Graham from the position of Hon. Treasurer, and expresses the hope that his health will be soon restored."

The motion was warmly supported by Dr. CUTTS, and unanimously adopted.

VOTE OF THANKS TO THE RETIRING HON. SECRETARY.

Upon the motion of Dr. Henry, seconded by Dr. Joyce, a vote of thanks was passed to Dr. Springthorpe for the services he had rendered to the Branch during the three and a half years that he had held office as Hon. Secretary.

Dr. Springthorpe suitably replied.

At the invitation of the ex-President, members then adjourned to his private residence, and spent the remainder of the evening in a social manner.

The following is the present Roll of Members :—

ROLL OF MEMBERS.

A'Beckett, William Goldsmid, M.R.C.S. Eng., L.S.A. Lond.

Adam, George Rothwell Wilson, M.B. et Ch. M. Ed.

Abramowski, O. L. M., M.D. Berlin.

Anderson, Eugene Wilton, M.B., Ch. B. Melb., L.R.C.S., L.R.C.P. Ed.

Anderson, James, L.R.C.S., L.R.C.P., L.M. Ed., L.F.P.S.G.

Backhouse, John Burder, M.B. et Ch. B. Melb.

Balls-Headley, Walter, M.A., M.D. Cantab., F.R.C.P. Lond.

Barker, Walter H., M.R.C.S.

Barker, William, M.R.C.S. Eng.

Barr, Thomas James, L.R.C.S., L.R.C.P. Ed.

Barrett, James W., M.D., Ch. B. Melb., F.R.C.S. Eng.

- Bennie, Peter Bruce, M.A., M.D. et Ch. Melb.
Bird, F. D., M.B., M.S. Melb., M.R.C.S. Eng.
Black, Archibald Grant, M.B. et Ch. M. Glas.
Bowen, Thomas Aubrey, M.R.C.S. Eng., L.K.Q.C.P.I.
Bradford, William Arthur, M.B. Ch. M. Glas.
Brett, John Talbot, M.R.C.S. Eng., L.R.C.P. Lond.
Burke, Stephen John, M.R.C.S. Eng., L.K.Q.C.P.I.
Burton, William Henry, M.D. Toronto, M.R.C.S. Eng., L.R.C.P. Lond.
Carstairs, James Grafton, M.D. Ed., L.R.C.S.
Chapman, J. T., L.R.C.S.
Cheetham, Francis, L.R.C.P., L.M. Edin.
Clendinnen, Frederick John, L.R.C.P. et S. et L.M. Ed., L.M. K.Q.C.P.I., L.R.C.P. Lond., M.D. et D. Ch. Brux.
Cobb, J. F., M.R.C.S.
Colquhoun, Archibald, L.R.C.S. Ed., M.B. Glas.
Cox, James, M.D. Melb., M.R.C.S. Eng.
Croker, Patrick Alfred, M.B., Ch. M. Glas.
Cunningham, Peter Hannah, M.B. et Ch. M. Glas.
Cutts, William Henry, M.D. Ed. et Melb., L.S.A. Lond.
Daniel, Frederick, L.F.P.S. Glas.
Davenport, Arthur Frederick, M.B. Lond., M.R.C.S. Eng.
Dunn, Robert Henry, M.R.C.S. Eng.
Doyle, Patrick, M.D.
Elliott, Nicholas Phillips, M.R.C.S., L.R.C.P. Ed.
Embling, William H., L.R.C.P.
Fenwick, Henry Marshall, M.B. Durham, M.R.C.S. Eng.
Fetherston, R. Herbert, M.B., Ch. M. Ed., &c.
Finlay, William, M.D. San Francisco.
Fishbourne, John William Yorke, M.B. et Ch. M. Dub.
FitzGerald, Thomas Naghten, F.R.C.S.I.
Fleming, Harloe H., M.B. et Ch. B. Dub.
Flett, William Simpson, M.B., Ch. M.
Ford, William H., M.R.C.S.
Fulton, John, M.D. Glas.
Fyffe, Benjamin, M.R.C.S. Eng., L.R.C.P. Lond.
Galbraith, James, M.D. Melb.
Gamble, Henry W. B., L.R.C.S. Ed., L.S.A.
Goodall, Charles E., M.B., B.S.
Graham, George, M.D. Melb., M.R.C.S. Eng.
Grant, David, M.A., M.D., C.M. Edin.

- Griffith, James de Burgh, M.B. et Ch. M. Dub.
Günst, Charles Werner, L.R.C.P., L.F.P.S.
Haig, William, M.D. Maryland.
Harricks, Francis Meagher, L.R.C.S.I., L. et L.M.K.Q.C.P.I.
Heffernan, Edward Bonaventure, M.D. et Ch. B. Melb.
Henderson, Colin, M.D. Ch. M. Aberd.
Henry, Louis, M.D. Wurtz, L.R.C.P. Lond.
Hewlett, Thomas, M.R.C.S. Eng., L.S.A.
Honman, Andrew, M.R.C.S. Eng., L.S.A. Lond.
Hooper, John William Dunbar, L.R.C.P. et S. Ed.
Hora, Tudor, M.R.C.S.
Hudson, Robert Fawell, L.F.P.S.G., M.D. St. A. et Melb.
Inglis, Edgar Montgomery, M.B., Ch. M. Ed., &c.
Iredell, Charles Lesingham Maynard, L.R.C.P. et L.M. Ed.,
M.R.C.S. Eng., L.S.A.
Jackson, James, M.D. Lond. et Melb., M.R.C.S. Eng.
Jamieson, James, M.D., Glas. et Melb., Ch. M. Glas.
Johnston, James Couper, M.B. et Ch. M. Ed.
Johnstone, John, M.B., Ch. M. Glas.
Jordan, Thomas Furneux, M.R.C.S. Eng.
Joske, Alexander Sydney, M.B. et Ch. B. Melb.
Joyce, John Fuller, L.R.C.S. Ed., L.R.C.P. Ed.
Kenny, Augustus Leo, M.B. et Ch. B. Melb.
Le Fevre, George, M.D. et Ch. M. Ed., M.D. Melb., L.S.A. Lond.
Lillies, Herbert, M.R.C.S.
Lynch, P., L.R.C.S., L.R.C.P.
Macansh, W., M.B. et Ch. M. Ed.
MacInerney, James, L. et L., M.K.Q.C.P.I., L.R.C.S.I., L.A.H.D.
Main, Henry E., M.B., B.S.
Marchbank, John, M.B. et Ch. M. Ed.
Maudsley, Henry C., M.D., M.R.C.P. Lond.
McCarthy, Charles Louis, M.B. et Ch. B. Melb.
McCrea, William, M.B. Lond. et Melb., M.R.C.S. Eng., L.S.A.
Lond.
McMullen, Hamilton, M.B. Dub., L.R.C.S.I. et L.M.
McMillan, Thomas Law, M.D. St. A., L.R.C.P. et S. Ed.
Meyer, Felix, M.B. et Ch. B. Melb.
Mollison, Charles H., M.B., M.R.C.S.
Molyneux, J. F., M.R.C.S.
Morrison, Alexander, L.R.C.S., L.R.C.P., L.M. Ed.
Morrison, William, M.A., M.B., Ch. M. Glas.

- Neild, James Edward, M.D. et Ch. B. Melb., L.S.A.
O'Brien, John Aloysius, M.B. et Ch. M. Glas.
O'Brien, John William, M.B. et Ch. B., T.C.D., F.R.C.S.I.
O'Donnell, Nicholas M., M.B. B.S.
O'Neill, John, M.D. Ed.
O'Sullivan, Michael Ulich, L.R.C.P. et S. et L.M. Ed.
Owen, William Hall, L. et L.M., K.Q.C.P.I.
Pinnock, Robert Denham, M.B., Ch. M. Glas.
Praagst, Lionel, M.B. B.S.
Radcliffe, Henry Hayton, M.R.C.S., L.S.A.
Ralph, Thomas Shearman, M.R.C.S., L.S.A.
Ramsey, John, M.D. Glas.
Rankin, William Bailey, F.R.C.S. Ed.
Routledge, C. J., L.R.C.S.I.
Rowan, Thomas, M.D. Syd., F.R.C.S. Ed.
Rudall, James Thomas, F.R.C.S. Eng.
Ryan, Charles Snodgrass, M.B. Ed. et Melb., Ch. M. Edin.
Scantlebury, George J., L.R.C.S., L.R.C.P., &c.
Schleicher, Charles, M.D. Wurtz.
Shields, Andrew, M.D. Ed.
Simmons, Edward Lamburn, M.R.C.S. Eng.
Skinner, David, M.A., M.B. et Ch. M. Aberd.
Smith, W. Beattie, F.R.C.S. Ed.
Snowball, William, M.B. et Ch. B. Melb., L.R.C.S. et L.M. Ed.,
L.S.A.
Springthorpe, John William, M.D. et Ch. B. Melb., M.R.C.P. Lond.
Steel, Thomas Henry, M.D. Glas., L.F.P.S.G.
Stewart, Charles A., L.R.C.S., L.R.C.P., &c.
Stirling, Robert Andrew, M.B. et Ch. B. Melb., L.R.C.P. et S. Ed.
Syme, George Adlington, M.B. et M.S. Melb., F.R.C.S. Eng.
Talbot Robert, M.D. Edin et Melb., Ch. B. Melb.
Thomson, Barclay, M.B., C.M.
Von Mueller, Baron Sir Ferdinand, F.R.S., K.C.M.G. Ph. D., &c.
Whitcombe, William Phillip, M.R.C.S.
Wight, J. C., M.B., M.R.C.S.
Williams, David John, M.D. St. And., F.R.C.S. Eng.
Willmott, Julius John Eardley, M.D. et Ch. M. Aber., M.R.C.S.
Eng.
Woinarski, Gustave Henry Zichy, M.B. et Ch. B. Melb.
Woodforde, Alfred Ernest, L.R.C.S., L.R.C.P. Ed.
Woolley, George T., M.R.C.S.

Hospital Reports.

MELBOURNE HOSPITAL.

Exophthalmic Goitre.

Under the care of Dr. MOLONEY.

[Case exhibited at Medical Society, December 5, 1888.]

E.P., æt. 26, single. Three years ago her sister's sudden death gave her a great shock; an attack of facial erysipelas followed, which left palpitation, especially on exertion, and protrusion of and pain in the eyeballs.

For some months preceding her illness her menses became pale, scanty and irregular, and she often does not menstruate for three months.

On admission, the thyroid gland is seen to be swollen, especially the right side, which is the size of a Mandarin orange. She is in fair condition, having put on flesh lately. Tongue is small, red, tremulous; fair appetite; requires aperients. She has had ascites, and œdema of legs, which disappeared, but there is slight œdema now. There has been œdema of face. The eyeballs are very prominent: the sclerotic injected with large vessels; the corneæ opaque, the right the more protuberant, conical; the left flat. She is blind, being only able to distinguish daylight. The lids completely close over the eyes, and follow the downward movement of the eye naturally. The affection of the eyes has gradually increased for the three years. The eyes are painful during palpitation, which comes on generally during the afternoon, and lasts about five minutes, leaving her weak and unable to eat for a couple of hours. The palpitation is felt and seen in the gland, in the arteries of the neck, and over the heart. Is small in figure, features regular; is an intelligent girl, but is obstinate and fretful, and inclined to religious mania.

Family history unimportant. Born in Daylesford, which she left for Williamstown five years ago. Has never had rheumatism; heart sounds regular; has some dyspnoea on exertion.

Mr. J. Williams, the secretary to the Melbourne Hospital, left by the R.M.S. Carthage, February 9th, on a visit to Europe. The principal object of Mr. Williams' trip is to inspect and report on the latest and most approved systems of hospital buildings and appliances, not only in England, but also in the leading Continental countries, and in America.

Australian Medical Journal.

FEBRUARY 15TH, 1889.

THE TREATMENT OF HYDATIDS.

Just a year ago, in the *Journal* of Feb. 15, 1888, attention was drawn to the treatment of hydatid cysts, and it was suggested that a discussion on this subject ought to be a prominent feature of the Congress. Now that the discussion has taken place, it may be well to consider its results, for it will assuredly be one of the most interesting parts of the Congress proceedings in the eyes of the profession in other countries. It is a great pity that a greater unanimity of opinion could not have been attained. *Tot homines tot sententiæ* would almost sum up the discussion, but the main difference of opinion turned on the value and advisability of tapping, as opposed to the necessity for incision and removal of the cysts.

Broadly speaking, the older practitioners of Melbourne, Sydney, and the country districts place a high estimate on the curative value of tapping, and regard it as at all events a comparatively harmless procedure. The younger generation, and especially the Adelaide surgeons, think tapping fails as often as it succeeds, and is by no means devoid of danger. They therefore advise the complete removal of the cyst by incision. Of course there are minor differences among men of what may be called the two schools. We have used the term tapping very broadly to include aspiration, tapping with trochar and canula, and retained canula, and some men prefer one and some another of these methods. On the other hand, among the advocates of incision, while Dr. GARDNER would never tap or aspirate except for diagnostic purposes, and immediately before incising, Dr. THOMAS does not object to trying the effect of a single tapping, and states that "the objection to simple puncture . . . lies less in the occasional perils of the operation, than in its frequent inefficacy."

It is greatly to be regretted that the advocates of tapping brought forward no statistics of their practice, and spoke

only from general impressions ; and it is to be hoped that the question will not be allowed to rest in its present position, but that some reliable records of the results of the tapping method, in the hands of its advocates, will be compiled. Our own impressions of tapping, gained from over ten years' observation of the practice of its upholders, is distinctly unfavourable, and we would go further than Dr. THOMAS, in regard to the perils of the procedure. Two cases that came under notice, but have never been published, may be briefly referred to in illustration. A girl, æt. 14, was admitted to Hospital with a large hydatid of the liver. An ounce of blood-stained fluid was drawn off with an aspirator. A trochar was then introduced, and twenty-six ounces of blood-stained fluid withdrawn. Rigors and high temperature ensued, and she died in a few days. It was found that the inferior vena cava formed part of the wall of the cyst, and had given way, permitting free communication between the cyst and the vein. In another case, a man was admitted with a large hydatid of the liver, was tappéd, and died collapsed the same night. In this case, the omentum was found to be adherent to the lower border of the liver, and the trochar, in its course to the cyst, had passed through a vein in this portion of omentum, and caused fatal hæmorrhage.

It will be admitted that the results of abdominal surgery all the world over, show conclusively that an incision through the abdominal wall, made by a skilful surgeon, with reasonable precautions as to surgical cleanliness, is practically devoid of danger, and we believe that the risk is really less than that incurred by a stab in the dark with a trochar. In a paper on "Laparotomy for Omental Hydatids," read before the Kiév Medical Society (abstracted in the *London Medical Recorder* for August 20, 1888), Prof. GHEORG E. REIN, one of the most eminent Russian laparotomists, states that he does not resort to puncture, in view of the consecutive suppuration of the hydatid cavity which had taken place in ANNANDALE'S case, and two cases of FREUND'S, which had ended fatally after puncture. In common with FREUND and HEGAR, Prof. REIN earnestly warns against this procedure.

Another point may be urged against tapping, which, we think, has not been previously brought forward, and that is that a hydatid may be assumed to have been cured by this means when it has not been, but remains as a source of danger to the patient's life, as illustrated by the following case, also unpublished:—A young man was admitted to Hospital with pyæmia, the result of suppuration of a large liver hydatid. He stated that when a child, he had been treated by tapping for a hydatid of the liver, and was supposed to have been cured. At the autopsy there was no trace of any other cyst but the one that was suppurating, and this, therefore, must have been the one originally tapped. There can be very little doubt that if many of the cases supposed to be cured could be carefully followed up, it would be found that the cyst had re-formed. Patients, however, do not always return to the surgeon who professed to have cured them, and hospital patients often get placed under different surgeons. Thus recently, a case came under notice of a patient who was tapped in hospital, and the cyst did not re-fill for some time, and he was discharged as cured. About eighteen months afterwards, he was re-admitted under another surgeon, with empyema, caused by the rupture of the cyst through the diaphragm. This time portions of several ribs were excised, and the mother cyst extracted.

We do not for one moment deny that many cases do recover after tapping, but do not the records of post-mortem rooms reveal innumerable cases that have got well or remained latent without treatment at all? And it is almost as reasonable to say that, because these cases got well without treatment, we should not interfere at all, as to say that because some cases got well after tapping, this is the best treatment. We think Dr. THOMAS' figures show conclusively that tapping fails in at least 40 per cent. of the cases, and probably in more; we have shown that it may be a fatal operation; the experience of those who practice incision and removal of the cyst and its contents, shows that the latter operation is as safe and much more certain than that of tapping. It is earnestly to be hoped, however, that the actual statistics of the tapping method

will be forthcoming, and that cases like those we have briefly referred to will be published in full.

Reviews.

Diseases of the Skin: By H. RADCLIFFE CROCKER, M.D. London, F.R.C.P. London, Physician to the Department for Diseases of the Skin, University College Hospital, &c. London: H. K. Lewis, 1888.

It is doubtful whether any department of medicine has been so fertile in the production of new text books during the last year as has Dermatology, and its student may well be sorely embarrassed by the array of works on this subject presented to his choice. Among them all, a high place must be awarded to Dr. Crocker's very handsome volume. It presents not only a most careful and exhaustive *resumé* of the most recent British, European, and American Dermatological literature, but also much original work and observation. Nearly all the illustrations, a goodly number, are taken from the author's own preparations, and the anatomy and histology of the various lesions are described with a fulness and accuracy to be met with in few text books on the subject. Dr. Crocker's work is eminently scientific, and appears to represent the inner thought, so to speak, of leading modern dermatologists better than any work with which we are acquainted. Another striking feature is its comprehensiveness, and the excellent judgment shown in the proportioning of the important and unimportant. Rare and curious affections, like the Conglomerative pustular peri-folliculitis of Leloir, and Xanthoma diabeticum, are shortly but so clearly described as to be easily recognised. Pityriasis rosea is more fully described, as is Cheiopompholyx. The account of medicinal rashes is extremely full and good, no less than 27 being described. Dr. Crocker concludes that they are all presumably due to a vaso-motor neurosis. Under the name of Dermatitis Repens, some peculiar cases are described that do not appear to have been observed by other writers. They all began something like an eczema on the lower part of the upper extremities, and spread very rapidly.

The nomenclature of skin diseases is an admittedly very difficult and unsettled subject, but it is not easy to understand why the peculiar ringed eruption so frequently observed in a triangular

patch on the chest and back of adult males, and called by so many names, should be placed, even provisionally, under the division Lichen. Dr. Crocker admits that the word Lichen should be restricted to the three recognised forms—*L. planus*, *L. ruber*, and *L. scrophulosus*. Then why call this affection Lichen Circinatus? We know it is not a Lichen; many believe it is a form of Seborrhœa. Why not then place it provisionally as Seborrhœa Corporis, as is done by Duhring and most American writers? While on the subject of nomenclature, it may be noted that Dr. Crocker still retains that most ambiguous word tubercle among the primary lesions. Why not substitute the word nodule, as suggested by Dr. Pye-Smith? The description of Morphœa as a circumscribed scleroderma is, we think, a very justifiable one, it being, as Dr. Crocker observes, most undoubtedly closely related to the diffuse form, both clinically and anatomically.

The chapter on Hydroa clears away a deal of confusion from this affection, and is a capital example of the author's lucid treatment of his subject. This chapter also well illustrates, what is noticeable all through the work, the tendency of modern Dermatology to arrange diseases in larger and more natural groups—to synthesis, rather than analysis. It is evidently becoming more and more recognised that the apparently distinct diseases of the older writers cannot be separated by such clearly marked lines of demarcation as was thought, but merge naturally and insensibly into one another, and present unexpected alliances and relationships. Thus, at first sight, simple Erythema seems distinct enough from Pemphigus; but it is obvious from this chapter that Erythema multiforme and Hydroa are links in a chain that unmistakably connects the one with the other.

The portions devoted to treatment, are decidedly the least satisfactory, as they always seem to be in works on this subject. This, perhaps, is only natural, for in no class of disorders is treatment for the most part so purely empirical; and success therein seems to depend chiefly on an almost intuitive knowledge, the result of long experience, but a knowledge that it is well nigh impossible to convey to others through the medium of a book. Dr. Crocker's treatment is whenever possible rational and based on principle, and so far as the student is concerned is for the most part admirable. It would be easy to multiply instances of this, but it will suffice to refer to his constant insistence on the

necessity for fully investigating and treating general conditions, for seeking out hidden causes and removing them, before flying to so-called specifics. The importance placed on the mode of application of remedies may also be noted with approval. Still, we are afraid the busy practitioner who appeals to these pages for help when baffled by an intractable case, may perhaps feel rather disappointed. But, on the other hand, it is doubtful if any other book would assist him any more, and we can say this much, that a practitioner who has mastered this work, and has had a fair clinical experience ought not to be very frequently baffled. In short, this book can be thoroughly recommended as in every way sound and reliable, and unusually comprehensive.

G. A. S.

A Manual of Ophthalmic Practice: By CHARLES HIGGENS, F.R.C.S.E., Ophthalmic Surgeon to Guy's Hospital. London: H. K. Lewis, 1888.

Yet another is added to the list of text books in the English language on diseases of the eye. We could wish that it had not appeared, since it excites unfavourable comparison with preceding similar works.

A considerable amount of information is compressed into a comparatively small space, and, in spite of the extraordinary division of eye diseases into those which require medical treatment, and those which require operation, a perusal of the work is fairly instructive. Yet we should imagine that a student would find it very difficult to extract an idea of the principles of Ophthalmology from a study of this manual.

Looking through the book we find that Liebrich's ophthalmoscope is commended, and a diagram of the instrument finds place. We had thought that at the end of the nineteenth century, no one would be recommended to examine the fundus by the direct method without an ophthalmoscope provided with an oblique mirror, and a series of lenses capable of being placed behind the sight hole. We find the treatment of penetrating wounds of the cornea described as follows:—"When the iris is prolapsed it must be returned, and if possible retained in position. If it cannot be returned, a careful iridectomy, including the prolapse, must be performed. In cases where the lens has been wounded or iritis set up, a solution of sulphate of atropine (gr. $\frac{1}{2}$ — gr. 1 to $\frac{3}{4}$ of water) should be dropped into the eye, three to six or eight times a day,

and the eye should be carefully bandaged with lint soaked in belladonna lotion. Should the lens swell and cause pain and increase of tension, it must be removed without delay, or iridectomy must be performed. Iridectomy may have to be performed at some future time for optical reasons, or to obviate the irritation caused by dragging on an anterior synechia. Traumatic cataract may also require to be treated." Such are the directions given for the treatment of perhaps the most dangerous accidents with which the oculist has to deal! We can only suppose that this description owes its origin to the condensation of the work.

Under the head of Glaucoma (p. 175) we are told that Glaucoma can be remedied by operation alone. Yet on p. 176 the author writes, "In simple Glaucoma operative interference is anything but satisfactory," and again, "On the whole an operation in simple Glaucoma should not be rashly undertaken." Later on the beneficial action of eserine is casually referred to.

Altogether, it seems to us that if the amount of information which the book contains had been properly arranged, and if the principles of treatment had been clearly defined, the result would have been very much more satisfactory, and should the author issue a second edition it is to be hoped that he will so arrange his work as to make it representative of the celebrated medical school in which he holds office.

J. W. B.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee held on 22nd ult., a letter was received from Dr. Praagst, one of the resident medical officers, stating that he had received an appointment at the Women's Hospital, and tendering his resignation as a member of the Melbourne Hospital staff. He applied that the rule, setting forth that the salary of the resident medical officer should be forfeited if he retired before the expiry of the yearly period, should not be enforced. The resignation was accepted and the application granted.

The Secretary reported that about thirty members of the Intercolonial Medical Congress had paid a visit to the hospital on the 11th ult., and were shown through the wards by Mr. T. N. FitzGerald.

The Chairman handed in a cheque for £10,000, being the amount of the Centennial Gift Fund, to be placed to the credit of the maintenance fund. He stated that the result of this contribution was, that instead of being heavily in debt, the hospital had now a balance in hand of £2191 15s. 7d.

At the meeting of the Committee held on the 5th instant, leave of absence for one month was granted to Mr. James, hon. medical officer, and for a fortnight to Drs. Bird and Grant, also of the hon. medical staff.

Dr. Griffith wrote resigning his position on the hon. medical staff, and stated that he did so with great regret. The resignation was received.

Dr. R. A. Stirling, being the only nomination for the vacancy caused by the resignation of Dr. Ryan on the honorary medical staff, was appointed.

The annual meeting of the subscribers to the Melbourne Hospital was held in the board-room, on the 31st ult. Mr. Williams, the Secretary, read the annual report of the Committee of Management. It showed that the receipts for maintenance during the year had amounted to £35,611 9s. 10d. This included the Government grant of £14,000, the Centennial Gift of £10,000, and £3991 2s. 2d. from the Hospital Sunday Committee. The expenditure for the year had been £26,089 3s. 1d., but in addition to this a debit balance of £5604 9s. 9d., which had been brought forward from the previous year, had been liquidated, and there was a credit balance in hand of £2191 15s. 7d. For the building fund, the amount received was £2131 8s. 2d., while the numerous alterations and improvements that had necessarily to be made, entailed an expenditure of £2375 14s. 3d., and this deficit, added to the debit balance brought forward from previous years, left that fund £6813 6s. 5d. in debt. The endowment fund had been increased to £31,693 12s. 10d., of which £31,097 16s. 10d. had been placed on fixed deposit. During the year, 20,851 cases had been treated in the institution. Of these 16,635 were out-patients, while 4216 had been received into the wards of the Hospital. Of the latter, 3104 were discharged cured or relieved, 101 left as incurable and for other reasons, 746 died, and 265 cases still remained in the institution on the 31st of December last. Of the fatal cases, 224 died within 72 hours of their admission. The increase in the number of medical students in attendance on the practice of the hospital, and the demands for

extra accommodation for patients of all classes, had forced upon the Committee the necessity of extending the building, and this would receive the earliest consideration. In return for signal benefits conferred upon the institution, the Committee recommended that Dr. J. P. Ryan, Messrs. Derbin Willder and J. S. Butters, M.L.C., should be added to the list of honorary life governors. The Committee also desired to tender their best thanks to the Hospital Sunday Committee, to the Committee of the Convalescent Homes for Men and Women, and to the ladies of the Flower Mission, for valuable aid rendered to the institution; to Dr. Moloney for his gift of pictures, and to the Secretary for the energetic manner in which he had carried out his work.

WOMEN'S HOSPITAL.

At the meeting of the Committee, held on the 18th ult., the following letter was received:—

"The committee of the Lying-in Hospital having asked me to express my opinion on this hospital, I have much pleasure in so doing. Yesterday, Dr. Hooper very kindly showed me over the building, explaining fully its working. After a careful and thorough scrutiny, the conclusion I have arrived at is that this institution is by far the most perfect of the kind that I have ever visited, most admirably suited to the climatic influences and local environs, and reflects immense credit on the promoters, designers, medical staff, and committee. The sanitary and hygienic arrangements, the methods of isolation of suspicious and doubtful cases, and the antiseptic precautions seem almost perfect, and I can offer no suggestions for their improvement. It would be a generous concession on the part of the committee if plans of the building, copies of the rules, and a general detail of the working management, &c., were printed, so as to be available to anyone interested in, or seeking information on the subject of, lying-in hospitals, and, as president of the Obstetric and Gynæcological Section of the Intercolonial Medical Congress, I am but expressing the opinion of every member who visited the institution, when I say such plans, synopsis of rules, &c., would form a very valuable contribution to the proceedings of the Congress, now in course of publication.

"FERD. BATCHELOR, M.D.

"Lecturer on Midwifery and Gynæcology to
the University of Otago, N.Z."

ALFRED HOSPITAL.

At the meeting of the Committee held on the 25th ult., Dr. W. H. Embling, chairman of the hon. medical staff, reported that the hospital was overcrowded, and during the week the resident officers had had to send many urgent cases away—one of strangulated hernia. So many serious accidents had happened, and the typhoid epidemic had spread so rapidly, that he had urged the absolute necessity of lessening the "60 days' list," and during next week he hoped arrangements would be made by which chronic cases would be sent out of the hospital.

Mr. R. C. Norman, who temporarily filled the office during Mr. Anderson's absence on leave, was unanimously elected secretary.

At the meeting of the Committee held on the 8th inst., Councillor J. Beatty, of Prahran, attended as a representative of the conference recently held at St. Kilda on the subject of establishing a fever camp in the grounds of the Alfred Hospital. It had been agreed by the councils of Prahran, St. Kilda, Brighton, Malvern, and Port Melbourne to establish such a camp, and that the first tent, to contain 10 beds, would be erected next day, a second tent being got ready at once. The five municipalities named were prepared to defray *pro rata* the cost of the erection of the tents and their equipment, and to pay to the hospital 35s. per week for the maintenance, &c., of each patient sent. More tents would be furnished if required. The South Melbourne Council had made separate arrangements for the care of their fever patients with the Homœopathic Hospital committee. On the motion of Mr. D. Benjamin, the managers agreed to consent to the erection of the tents in places to be pointed out by the house committee.

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and suburbs for the month of December 1888, shows that the births of 1265 children, viz., 668 boys and 597 girls, were registered.

The deaths registered numbered 1112, viz., 605 males and 507 females. To every 1000 of the population of the district, the proportion of births registered was 3·23, and of deaths 2·84.

One hundred and forty-six deaths, or 13 per cent. of the whole, took place in public institutions. The number of children under one year who died was 528, the total number under five years being 627.

Deaths from zymotic diseases rose from 123 in November to 191 in the month under notice. Under this head an increase of 53 took place in deaths from diarrhoeal diseases, of 23 in deaths from typhoid fever, of 3 in deaths from whooping-cough, and of 1 in deaths from diphtheria; whilst, on the other hand, a decrease of 4 took place in deaths from scarlet fever. Under the head of constitutional diseases, deaths from phthisis increased from 73 to 92; and under the head of local diseases, deaths from stomach and bowel complaints increased from 129 to 221. During the whole year 1888, deaths from typhoid fever numbered 328, and those from diphtheria numbered 138, as against 338 and 63 respectively in the previous year.

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—Michael Joel Cohn, Sandhurst, Staats Examen 1874, M.D. Copenhagen; William Mayne Clayton, Sunbury, L. 1876, L. Mid. 1883, R.C.S. Irel., L.K.Q.C.P. Irel. 1883; William Johnstone Cameron, South Yarra, M.B. et Ch. M. Edin. 1885; Thomas Barrow Birchall, Elsternwick, M.B. et Ch. M. Glas. 1879; Edward Henry Wheeler, Carlton, L. et L. Mid., K.Q.C.P. Irel. 1887; Frederick Hamilton Kenny, Melbourne, L.S.A. Lond. 1881, M.R.C.S. Eng. 1882; Robert George Reid, Nagambie, L. et L. Mid., R.C.S. et R.C.S. Edin. 1888, L.F.P.S. Glas. 1888. Additional qualification registered:—Charles E. Goodall, Balaclava, Ch. B. Melb. 1887. Names of deceased medical practitioners erased from the Register:—No. 907, Tudor Hora, M.R.C.S. Eng., &c.; No. 1302, Thomas D. Moore, L.R.C.S. Irel.; No. 65, John Cruikshank, M.D. Edin., &c.

HEALTH OFFICERS.—The following appointments have been confirmed:—Shire of Woorayl—John Park Montgomery, M.B.; City of Sandhurst—John McIntyre Eadie, M.B., *vice* John Cruikshank, M.D., deceased; Shire of Yarrowonga, District of Cobram—John Timothy Kennedy, L.R.C.P.

PUBLIC VACCINATORS.—The following appointment has been made:—Beechworth—Alfred Henry Parker, L.R.C.P., *vice* Henry T. Fox, M.R.C.S., whose resignation has been accepted. The appointment of James Dunlop Boyd, M.D., as Public Vaccinator at the Lying-in Hospital connected with the Bendigo Benevolent Asylum, Sandhurst, has been cancelled.

JUNIOR DEPUTY MEDICAL SUPERINTENDENT, HOSPITAL FOR THE INSANE.—Charles H. Hill, M.B., has been appointed a Junior Deputy Medical Superintendent, Hospitals for the Insane. Appointment to date from the 11th January, 1889.

CENTRAL BOARD OF HEALTH.—During the past month there has been a great increase in the number of cases of typhoid fever reported to the Board, and all the hospitals are now crowded.

The Board, at a meeting held on the 18th ult., decided that whenever a case of leprosy may be reported to it, the sufferer shall be at once removed to the middle quarantine station, and placed under the care and supervision of the resident medical officer (Dr. Browning), who will be responsible for his safe custody and well-being. The fee to be paid to medical practitioners who report outbreaks of typhoid fever was fixed at 2s. 6d. for each case, which is the amount paid for the operation of vaccination.

At the meeting of the Board on the 25th ult., the draft of a memorandum for circulation in localities affected with typhoid fever was adopted. A resolution was passed to the effect that in districts where typhoid fever has occurred, all public institutions—meaning by that railway stations and other public resorts, and all schools—should be provided with a daily service for the removal of nightsoil, and that a daily service of the same character be insisted upon in premises where typhoid fever patients were under treatment. A somewhat sensational report on the insanitary condition of a part of South Melbourne was brought before the Board by one of its inspectors, who stated that material, largely composed of decaying vegetable and animal matter, such as is usually collected by scavengers, was being used between Hanna-street and the St. Kilda-road, for the purpose of raising the formation level of new roads or streets. In fact, the road formation was at present the “tip” for the whole of the city. “The smaller dead animals,” so the report alleged, “are taken there among the garbage, which is spread the width of the road to a height of about 4 ft.” It was then venerated “with the cleaner street sweepings.” The Board decided to refer this communication to the South Melbourne Local Board, with the object of having some improvements effected.

BIRTHS.

LAWRENCE.—On the 5th inst., at Westra, Brighton, the wife of Dr. O. V. Lawrence, of Fitzroy, of a daughter.

OCHILTREE.—On the 3rd inst., the wife of Dr. Ochiltree, Ballarat, of a daughter.

SPRINGTHORPE.—On the 16th ult., at Camelot, Collins-street east, the wife of J. W. Springthorpe, M.D., of a daughter.

MARRIAGES.

SCANTLEBURY—BAYNES.—On the 8th ult., at St. Martin's Church, Hawksburn, by the Rev. Dr. Green, M.A., assisted by the Rev. W. K. Brodribb, M.A., Dr. George J. Scantlebury, of Linton, to Catherine Millington (Katie), youngest daughter of the late George Baynes, solicitor, Melbourne.

WOODS—GRIEVE.—On the 15th ult., at the residence of the bride's parents, by the Rev. Canon Acocks, William Cleaver Woods, M.D., Albury, to Margaret, fourth daughter of John Grieve, Bungowannah Park, Albury.

DEATHS.

STITT.—On the 4th inst., at Wernia, Edwards River, N.S.W., Hugh Stitt, M.D., aged 60 years.

WALSHE.—On the 21st ult., at his residence, Ryrie-street, Geelong, Eustace James Walshe, M.D., aged 73 years.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal

MARCH 15, 1889.

Original Articles.

TWO CASES OF PSOAS ABSCESS.

By J. H. WEBB, M.R.C.S.

[This paper is an amplification of the remarks made by Mr. WEBB on his two cases of psoas abscess exhibited at the February meeting of the Medical Society.]

These two cases had been treated and brought to a successful issue by means of loin incisions, and dependent drainage.

Mr. Webb remarked that the histories of these two patients presented nothing unusual. With respect to the former, the tall, thin woman, about 25 years of age, he chanced to come across her amongst the out-patients attending the Melbourne Hospital. This was just a year ago. She was then in a very low condition of health, the eleventh and twelfth dorsal and three upper lumbar vertebræ all showed evidence of anterior multiple erosion of their bodies; whilst in the left groin, pointing above Poupart's ligament, was an abscess of the description formerly known as iliac, but which is now classed under the general name of psoas. The patient, having been made to thoroughly understand the danger and progressiveness of her disease, was first treated by longitudinal incision, as suggested by Mr. Frederick Treves of the London Hospital, care being taken to ensure complete antisepsis, not only during the operation, but during the whole time the abscess cavities were discharging. The vertebræ were searched along the right side and front of the bodies involved, but no dead bone or scrofulous cavities could be discovered; the pelvis was then drained as well as possible with an india-rubber catheter, and the wound enveloped with the now-much-out-of-fashion carbolic gauze and impermeable tissue.

Mr. Webb expressed himself as being at the time not quite satisfied with the drainage obtained, as, in his experience, when the longitudinal opening is employed, unless the incision is prolonged downward as far as the transverse process of the last lumbar vertebra, it is nearly impossible to direct the tube in such a manner that the head of it shall enter the cavity that exists in

front, between the skin and the abdominal wall ; in this hollow the pus will inevitably collect again, unless kept empty by constant drainage. After a few days he found it imperative to evacuate the abscess at the site of presentation, just above the pubes, and keep it drained by threading the sinus—entering the probe in front and passing it out at the cut in the back. This succeeded for a time, but an abscess, similar to the one just referred to, formed on the opposite side, and was opened by a horizontal incision made just below the transverse process of the last lumbar vertebra. Through this incision the sides of the pelvis can be thoroughly explored, and the catheter put anywhere by manipulation with the forefinger. From this time forth the case made good progress, though interrupted at times by cough and indications of incipient phthisis. However, these have now passed off, and, with the complete healing of the sinus, the patient appears to have perfectly regained her health.

The other case shown was described as a psoas abscess, due probably to rupture of the psoas muscle. This was opened about the second week in December, and is now completely healed. The cause of this abscess is rather obscure ; but when it was first evacuated there was a distinct depression, or notch, in the course of the psoas, similar to that which would be expected in sudden separation of the fibres of a muscle. This gap has since filled up, and in its place a hard ridge can be distinguished ; not painful. There was a history of a sudden strain.

Mr. WEBB said, in addressing the meeting :—To my mind, psoas abscess is a singularly interesting malady, inasmuch as, unlike most surgical affections, it is met with in every variety of practice. The obstetrician encounters it after labour, the physician in connection with renal mischief, the general practitioner as a complaint not very infrequent in childhood, and the surgeon, until recently, as one of the most fatal and, not even excepting cancer, the most awful disease he has to combat against. It is interesting because every advance, which has taken place of late years in the recognition of the principles which should guide us in the practice of surgery, has found a field for its illustration in this domain of disease. It is only by the close observance of the four leading canons of surgery that the treatment of these deep-seated spinal abscesses can be brought to a successful termination.

By rest—and by “rest” I do not imply simple recumbence in bed, but rest so carried out that all parts of the vertebræ, patho-

logically separated, are held together in such a manner that union can again take place between them. In my opinion, it would be just as absurd to attempt the treatment of a fracture without a splint to steady the broken parts, as to endeavour to procure ankylosis of the diseased spinal segments without the aid of a plaster jacket. Let anyone, who doubts the necessity of immovably fixing the spine, follow his next case into the dead house, and examine for himself; I venture to say he will be much surprised at the looseness and detachment of the plates whence an abscess has started. Each movement, each time the patient turns in bed or replies to the calls of nature, must cause separation and constant friction between their surfaces. And this movement is all the freer because it takes place unchecked, or very slightly so, by pain. Vertebral disease can hardly be termed a painful malady, the increasing weakness and sense of excessive debility is very distressing but not painful, and it is on this account that, almost up to the day of their death, patients roll and turn about to the utmost extent their strength will allow, and in a manner not permitted by any other fatal malady I know of. We are under the impression that, because during life we do not actually see any abnormal movement of the vertebræ when the body is elevated or turned over, the affected discs are united. That this is not the case, the autopsy always proves. No matter how thoroughly in every other respect the affection is treated, unless the diseased parts are firmly splintered together, we cannot hope to obtain success.

In evidence of this, two years ago I treated a lad for multiple deep-seated abscesses. Their sinuses were well drained, their discharges so aseptic as to be harmless, and yet my patient was undoubtedly slowly but surely, day by day, slipping away. Previous to this he had for many months been encased in a gypsum jacket, and I thought that the affected vertebræ must have long since firmly joined, especially as I could not detect any movement between them.

Exhausted as the lad was, one day in desperation, I determined, in spite of his friends, in spite of his pathetic entreaties, that I would hoist him again and remould him in a plaster jacket, though, on account of the discharges, I should have to renew the support every few days. By alternate bullying and coaxing I succeeded, and so well that the lad slept soundly that night, the first time for weeks. In a day or two the despair and hopelessness,

whose appearance used to be the death-warrant of these cases, had gone, and he has been improving ever since. But for the lordosis, the contraction of both sartorii, he would be able to get about quite well now, and I am convinced that this recovery is entirely due to the timely re-application of the bandage. From the visits that I occasionally pay to the wards of the Melbourne and other Hospitals, I am strongly of the opinion that the reason why so many of these spinal cases, especially in adults, go to the bad, is because we are not sufficiently impressed with the necessity of immovably fixing the vertebræ.

As regards antiseptics, I am conservative enough to still adhere to complete Listerism—to the use of the spray, gauze, and carbolic acid; at all events to their use as long as the abscess cavity remains uncontracted. The results obtained by this method have been so marked, that I should be loth to desert such a useful friend as it has always proved. Moreover, the system inculcates cleanliness, care, and attention to details, and has a wholesome effect on the patient. I can conceive of nothing more seemingly negligent, though it may be effectual, than the system at present in fashion of simply dusting the parts with iodoform and covering the whole with dry wool; for patients, whose wounds are thus unceremoniously treated, are apt to become indifferent and not obedient themselves. If they don't at once improve, they lose patience, and in the end, I find, give far more trouble than those who have been subjected to discipline and strict antiseptics from the first.

Psoas abscesses may arise from—kidney lesions, the breaking up of scrofulous deposits in that organ, and I should say from calculi, though I have never seen a case whose origin could be attributed to this cause; their source may be peri-nephritic or peri-typhlitic; they may be associated with caries of the vertebræ; of the sacro-iliac articulation, and, strange to say, caries of the sacrum; they may be due to rupture of the psoas muscle. Those instances which we occasionally find reported set down to superficial vertebral erosion are, I think, probably peri-nephritic, attributable in the commencement to a blow; or, as I purpose to show, nephritic. They present, either in the iliac region above Poupart's ligament, or, following the vessels, escape from the pelvis and come to the surface either in the groin below Poupart's ligament, anywhere in the thigh, the calf of the leg, or as low as even the dorsum of the foot. They may appear in the scrotum, coming directly through

the obturator foramen, or having first entered the thigh curl upwards round the ramus of the pubis and then downwards under the dartos; or they may pass through the greater sciatic foramen and bulge in the gluteal region. The manner of evacuating these abscesses depends on the site of their presentation, and the seat of their origin.

It may be taken as a general rule that these pus accumulations should never be incised at the point where they come to the surface; the exceptions are instances where the fluctuation is detected at any spot below the middle of the thigh, and in collections that distend the scrotum. In the former, a counter opening will be required nearer the seat of disease; in the latter, the abscess should be considered and dealt with as a local deposit, and an attempt made to divert the drainage at a dependent position in the loin. A psoas abscess, bulging in Scarpa's triangle or thereabouts, should be tapped subcutaneously in the most convenient place for antiseptic dressing, which is about the middle of the thigh. If the abscess is opened in this way, not only does the cavity heal much more quickly, but the discharge is much more easily kept sweet. This method is very successful if the spinal column happens to be acutely bent, indicating that only one or two vertebræ are affected; but if the boss is round, showing that many discs are involved, an opening in the thigh should only be considered a preliminary measure, for most assuredly some dead bone, too large to escape by the sinus, will sooner or later be detached, and require removal through an incision in the loin. Intra-pelvic abscesses, those pointing through the abdominal walls or in the gluteal region, should always be evacuated through the back, and never aspirated. There are two methods of reaching the psoas sheath from the loin—one, by a longitudinal or Treves' operation, and another, by a transverse incision. This latter proceeding I practised myself many years ago, in 1878, when acting for a short time in the room of Dr. Beaney in the Melbourne Hospital. This case has been alluded to in a former paper, so I need not refer to it again. I may say that the longitudinal incision is the one best adapted for the removal of dead bone and exploring the lumbar spine, the transverse for draining the pelvis; the former is the easier to perform, the latter requires some careful manipulation and anatomical knowledge.

I have, in a former article which appeared in this Journal a few months ago, referred to the way in which detached bone becomes

imprisoned, and to the necessity of making every effort to effect its removal. It remains to say that these sequestra occur more frequently in childhood and early manhood than at any other time of life; they are to be expected when the boss is round, indicating that three (or more) vertebræ are implicated—a central one being, as it were, squeezed between one above and another below. When an abscess appears after ankylosis has been effected by means of spinal jackets and so forth, and an apparent recovery has taken place, loose sequestra are for a certainty present.

When an abscess arises from the front of the sacrum (I am not alluding to sacro-iliac disease following a wrench, but to caries from strumous deposits), two things have to be remembered. First, that pus from this source points in the groin before it can be detected by palpation in or about the gluteal region; and secondly, that sacral disease can only be particularised by the osseous protuberance. This makes an early diagnosis well nigh impossible, so much so that a very large amount of pus may have collected before the disease is even suspected. Naturally, the accumulation of pus means the tearing and separating of an extensive area of tissue, which consequently imparts to sacral affections a danger greater than that attached to any other morbid deposit in bone. In this situation matter may travel almost anywhere, and it does so against the grain or in a direction contrary to the course of the pelvic muscles, forcing its way between their fibres, and under their fasciculi. It may even extend as far as the origins of the psoas, and undermine its heads, and it may be considered a lucky thing if it finds its way early to the surface, either in the iliac region or in the inner side of the thigh. With such a possible and formidable lesion before us our treatment should unhesitatingly be directed towards assuring complete and dependent drainage, at the same time maintaining thorough antisepsis. We do this in the hope that the extensive abscess cavity will contract before septic microbes can enter and perniciously germinate. To open the abscess in the loin would really be to tap above the sacral hollow; and to attempt to remedy this, by elevating the buttocks, would probably be ineffectual—drainage procured by altering the natural position of the recumbent body is seldom satisfactory. Do what we will, mattresses will sink and pillows slip. The only means left, then, is to enter the pelvis through the gluteal notch.

This operation, which I have now undertaken three times—once for drainage, and twice for exploration—is performed by making an incision about an inch long through the skin and soft parts over the greater sciatic foramen, dividing the superior fibres of the pyriformis muscle, keeping the knife parallel, and as close as possible, to the outline of the sacrum, and then working a way through with the forefinger and a director. Once the pelvis is entered, the bone for a considerable distance can be examined. If caries is detected, the diseased parts should be well scraped, iodoformed and drained, by passing a tube across the sacrum through a similar opening in the ischiatic notch made on the opposite side. This done, the whole should be carefully covered up with antiseptic dressings, and retained in position by an elastic bandage. I hold it to be most important to maintain the strictest antisepticism, for in these instances the manner in which pus excavates and pouches is marvellous; it will pocket badly enough when finding its way downwards and in the same course as the muscles. I have a boy under my care at the present time, who has over his body no less than eight openings, and he has had several more, all of which are connected with one little inaccessible piece of dead bone. But this is nothing to what matter will do when forced in a direction contrary to the muscles. Each of these pockets, which cannot be separately drained, constitutes, if allowed to get septic, as long as it exists, a focus for the lodgment of stinking matter, and the constitutional mischief they are capable of setting up is enormous. On the other hand, if the contents of the abscess cavity are kept sweet, even for a time, when the tension is relieved from below, the distended tissues regain their elasticity, the secondary pouches collapse, and either gradually expel their contents, or painlessly distend till the pus can find its way to the surface. In these instances the dressing must, for some time, be renewed every day with the greatest possible care, as the proximity of the incision to the anus renders it both difficult to retain the discharges and to keep them sweet and clean.

I lost my case of sacral disease. After the bone was scraped and the abscess capitally drained, he progressed very favourably for a fortnight or three weeks, when I thought he would easily pull through. One day I noticed that the discharge smelt foul; on the following day his buttocks excoriated slightly, but sufficiently to make him very restless. I then changed the dressings to perfectly dry applications, and re-stuffed what remained of the

cavity with iodoform, but to no purpose; my patient slowly began to emaciate, and I witnessed what I had thought never to do again—the sad picture of a young lad dying day by day from hectic septicæmia, arising from the putrefaction of retained pus. I think this case ought to have recovered. He would probably have had one or more abscesses, consequent on the pockets I have spoken of; but if I could have maintained thorough antisepsis, they probably would have done him no material harm. Still he would have had a long way to go, for he had the most extensive intrapelvic abscess I have ever seen. It passed from the sacrum to the abdominal walls on both sides, and I believe some distance along the psoas muscle up the back. Fluctuation could be felt quite easily through the fleshless loins. I tapped it through the notch, on account of having previously noticed a sacral boss, and a diagnostic syringe revealed pus in that region. Of course it can easily be recognised what mischief a lesion like this must have occasioned, and, to add to the trouble, he had such a contraction of the sartorii, that both thighs were flexed as far as the powers of that muscle would permit. Still I have such confidence in Listerism and dependent drainage in dealing with deep-seated abscesses, that I think, if I had been enabled to keep the cavity sweet a little longer, I would have pulled my lad through.

There is another point in connection with psoas abscess to which I should like to draw your attention, and that is the difficulty there is in localising the origin of one of these collections when there is no boss to act as a guide, and the obscurity is increased if the pus has been allowed to escape from an opening in the groin before the case is seen. In these cases the history is generally most confusing; in fact, I should attach no great importance here to anything the patient had to say about himself, beyond what related to his urine. Had he ever seen blood or pus? If the abscess arose from peri-nephritic causes, the consequences of a wrong diagnosis with the loin incision would probably not be at all serious. But if the abscess came from a calculus or a scrofulous kidney, without an investigation of that organ, death must result. Hence the importance of a correct opinion, or an opinion on which it would be justifiable to act, is readily understood. An exploratory incision and an examination would of course clear up the doubts, but then a surgeon naturally hesitates to inflict a fresh, and it may be a purposeless, wound on a body already perhaps so exhausted

"that life hangs on a thread." The urine may afford no indication, for the ureter is as likely, in scrofulous disease, to be blocked, as free. Localised pain might be a valuable indication in the earlier stages, but later on, these patients are so numbed and listless, that not much dependence can be placed even on this symptom. Percussion, indicating a large round body, might be of assistance, but hardly sufficient by itself to justify operative measures. To tap the organ with a fine trocar would be useless, for scrofulous products, as met with in a kidney, will not escape along a fine tube, and, after all, this instrument might only give a negative verdict. An abscess, for instance, might be present in the kidney and the needle not pierce it.

Quite recently, during the absence of Mr. James, just such a case came under my charge in one of the hospital wards. I threaded the sinus, opened it in the loin, and searched the spine without discovering anything pertinent to the object sought; but one peculiarity struck me, and that was the narrowness of the sinus leading upwards, in fact the space in which the probe lay did not appear larger than a small quill, and properly, when the psoas sheath is distended, it should be of sufficient calibre to contain two fingers at least. The path of the abscess was along the vertebræ, and their bodies in the track were slightly eroded. I thought it peculiar that the pus had not entered the sheath of the psoas, either above or below the wound I had made, as far as my finger allowed me to probe. And yet, when one comes to think about it, this is the course the contents of a kidney abscess bursting in this direction would take. It would pass down along the front of the transverse process, between the bodies and the sheath of the psoas muscles, till it arrived at the iliac vessels, when it would follow them to the groin, and in their company emerge under Poupart's ligament. Thus a kidney abscess pointing in the groin is not a true psoas abscess, though it takes an all but similar course—the pus passing alongside instead of within the sheath of that muscle—and this accounts for the superficial lateral erosion of the vertebræ, which I believe is always met with in these cases, but seldom, or never seen with vertebral caries, and which has been accounted for as a scrofulous extension from the kidney.

With regard to the lordosis common to vertebral, as well as hip disease, this certainly arises mostly from contraction of the sartorius, but I think the conjoined tendon of the psoas and

iliacus must have some share in producing this annoying complication. Firstly, because it is met with in its worst forms when in hip disease the affection is seated at the neck of the femur and not in the joint proper, and because in cases of long-continued sinuses running in the course of the muscles in question, lordosis is sure, sooner or later, to become a prominent feature. In producing it in spinal disease the adductors can have no part, for they are not in any way implicated either by direct irritation or nerve reflex action, as they may be in hip affections.

Against this supposition is the fact that these two muscles are rotators more than flexors, still they are flexors, and as such, I think, come into play in maintaining lordosis when the sartorius has contracted to its utmost. Anyhow, what is certain is, that in acute flexion of the thigh when the sartorius alone is divided, the limb will not, for some time at least, regain its proper position in a line with the body, but it will, sometimes, at any rate, if the conjoined tendon is also tenotomised.

In spinal disease, to correct marked lordosis when once it has commenced is a difficult thing. Dividing the sartorius, as I have said, meets with only a partial success. Subsequent section of the conjoined tendon succeeded with me, but I should say it is an operation as well avoided if possible, for it is likely to affect the subsequent use of the limb—at least, that is my impression. Weights and pulleys, even if they could be applied, would be useless; the treatment, I think, lies rather in prevention than cure. The thigh should never be allowed to get flexed to any extent. Here, early tenotomy is useful, followed if possible with extension by a long splint. Still, occasionally, contraction will creep on most insidiously. The patient does not mention it, and the surgeon is unmindful of it, till one day he finds to his disgust and surprise, that his charge's contour is twisted like an S. For this reason alone, spinal cases, when once the sufferers take to their beds, should never remain long unvisited by their professional attendants.

THE MEDICAL STUDENTS' SOCIETY.—It has been decided by the Committee of the Medical Students' Society, to found a library of general literature in connection with the Society. The nucleus of a library has already been placed in the newly-acquired and comfortable club room at the Medical School, and we are glad to have an opportunity of informing any of our readers who have duplicate copies of the works of standard authors in their libraries, that donations of books will be gratefully acknowledged by the Secretary of the Medical Students' Society.

THE OPERATIVE TREATMENT OF ECHINOCOCCUS CYSTS OF THE LIVER.

Continued.

By J. DAVIES THOMAS, M.D. Lond., F.R.C.S. Eng.

VARIOUS FORMS OF INCISION OPERATIONS.

Operations by incisions upon hydatid cysts are influenced in an important manner by the precise locality of the parasite, so that it is necessary to consider separately—(a) abdominal, and (b) thoracic hydatids.

Some hydatid cysts which have their origin within the abdomen, necessitate operations which invade the thoracic cavity, *e.g.*, echinococci of the convex surface of the liver, and those connected with the upper part of the spleen.

In consequence of their relative frequency, the most important abdominal hydatids are those of the liver, and consequently they merit our first and most attentive consideration.

The Treatment of Echinococcus Cysts of the Liver, by various kinds of Incision Operations.

The recorded cases of liver echinococci, treated by various modes of incision, comprise a motley group. The earlier cases so dealt with were usually operated on under the impression that they were abscesses pointing on the surface; but, in later instances, the incision was made after unsuccessful attempts to cure the disease by other plans of treatment, such as tapping and canule-à-demeure, &c. Very frequently, during the employment of the caustic treatment, the sac was opened by an incision when it was believed that adhesions had been procured; and in other instances, preliminary incisions were made into, but not through, the abdominal walls, caustics being then applied to the bottom of the wound. In a few cases, non-suppurated hydatids were rashly cut into, without any precautions being taken to previously procure adhesions, the result generally being that the patient died quickly of peritonitis from escape of the cyst-contents into the peritoneal cavity. The danger of such a procedure soon forced itself upon the notice of operators, and thenceforth it became a recognised principle, that hydatids of the liver should not be incised, unless adhesions were believed to be present.

To attain this end, caustics were used by many operators, but others regarded them as unsatisfactory, and various means of procuring adhesions were suggested and practised. For example, Trousseau had

recourse to multiple acupuncture for this purpose. Begin's method consisted in reaching the tumour by repeated incisions, the wound being meanwhile plugged with lint; sometimes the first incision was carried down to the peritoneum, and occasionally, even through that structure. A modification of this procedure, resulting from the introduction of the antiseptic method, has been advocated and successfully practised by Volkmann. Another plan, having a similar aim, is Simon's method of double-puncture, followed by incision. Finally, as a result of the recent advances in abdominal surgery, comes the method of treatment generally associated in Germany with the name of Lindemann, of Hanover, by which the sac is immediately incised, its contents evacuated, the lips of the wound in the fibrous capsule being securely attached by sutures to the edges of the parietal incision.

Before entering into a detailed discussion of these various operations, it is necessary to distinguish between those cases in which the parasite is accessible through the abdominal parieties, and those in which it can be reached only by traversing the pleura, as when the cyst occupies the convexity of the liver; for it is obvious that the invasion of the pleura introduces a new element of difficulty and danger into the treatment.

In order to arrive at trustworthy conclusions, it is necessary also to separate those cases in which no precautions against escape of the cyst-contents into the peritoneal and pleural cavities have been taken, from those where such precautions have been taken. Also, it is needful to consider the influence of antiseptic treatment; of complete evacuation of the solid and fluid contents of the sac; of effective drainage, &c.

It follows that a just criticism of the results of the various incision operations is not by any means a simple matter. Operations by incision will be considered under two principal groups, viz., (a) abdominal incisions, (b) thoracic incisions.

1.—*Simple Abdominal Incisions, without precautions.*

In this class will come simple abdominal incisions in which no special precautions were taken to prevent the escape of the cyst contents into the peritoneal cavity. Many of these were operated upon under the mistaken idea that they were cases of abscess.

GENERAL RESULTS.

					No. of Cases.		Per Cent.
Deaths	..	..	..	..	23	..	38·5
Cures	..	..	..	..	34	..	56·5
Recoveries	..	..	..	..	3	..	5·0
					60		100·0

It will be seen by the above table that simple incision, without precautions, is a very mortal operation.

CAUSES OF DEATH.					Cases.
Peritonitis certainly in	..	..	..	..	7
Peritonitis probably in	..	..	..	..	4
Septicæmia	..	..	..	..	7
Exhaustion	..	..	..	..	1
Pleurisy	..	..	..	..	1
Uncertain	..	..	..	..	3
					23

Peritonitis seems to have been the cause of death in about half the fatal cases, and to have been itself occasioned by the escape of the cyst-contents into the abdominal cavity; in one instance however the fatal peritonitis was produced by the accidental puncture of the bladder in an attempt to procure drainage. The majority of the remaining deaths were apparently due to imperfect evacuation of the decomposed cyst-contents causing blood-poisoning. Multiple cysts were present in five fatal cases.

Cures.—In 23 of these cases it is clearly set forth that suppuration had taken place in the sac, and consequently, there is little doubt but that adhesions had formed; indeed, in some instances, it is expressly stated that the tumour was regarded as an abscess. It would profit little to devote much space to the discussion of this form of treatment; it suffices, however, by its appalling mortality, to teach the lesson that the cyst-contents should be jealously excluded from the peritoneal cavity. This vitally important object may be attained, before the opening of the sac, as by the methods of Simon and Volkmann, or at the time of incising the sac, as by the method of Lindemann.

SIMON'S OPERATION OF DOUBLE-PUNCTURE FOLLOWED BY INCISION.

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Recognising the dangers of permitting the escape of the cyst-contents into the abdominal cavity, and impressed with the disadvantages of the method of Recamier, in the treatment of liver hydatids, Simon devised and practised the method of procedure associated with his name. It must be premised, that both by Simon and by his followers, it was considered that suppuration of the cyst-contents formed an essential feature of the intended process of cure; this is clearly set forth in the contributions both of Uterhart and Simon himself (*loco cit.*)

The plan of operation as described by Uterhart is as follows:—At the most prominent part of the tumour, or where fluctuation is most pronounced, a fine exploratory trochar and canula are introduced to a depth of some inches; the trochar is removed, and the character of the fluid that escapes is observed in order to establish the diagnosis; if this be satisfactorily determined, a second fine or a somewhat larger instrument is inserted at a point two and a half or three centimetres (say an inch) distant. After a part of the contained fluid has been permitted to flow away through the canulæ, the latter are plugged with carbolised wax, and a protective dressing is applied; for the next few days the patient must remain very quiet in bed. In two or three days' time a portion of the accumulated fluid is again allowed to escape in order to see whether it contains any admixture of pus, and this inspection is repeated at intervals until the opacity of the fluid, and the penetrating odour, render probable the detachment and commencing decomposition of the mother-cyst. Simon generally allowed the canulæ to remain in the sac until the fluid of the cyst began to escape at the sides of the instruments. Then adhesions are likely to have been established between the sac and the parietes, and now incision into the cyst is performed between the two points of puncture. Unless some urgent symptoms, such as high fever with signs of oppression, appear, the operator may delay incision until the fourteenth day, or later. The solid constituents of the parasite should be removed as completely as possible by means of forceps, &c.

Uterhart compares this method with the caustic treatment, and insists upon the following points in its favour:—

1. That the diagnosis is safely established, before the commencement of the operation, by the introduction of the first canula.
2. The great certainty of the production of adhesions between the sac and the parietes. He states that on one occasion, after the double

puncture of a case of hydro-nephrosis, in a person who died soon after the operation from double pneumonia, the post-mortem examination showed that very extensive adhesions had formed within 48 hours. It can also be seen that, in two or three days' time after puncture, the tumour no longer slides under the abdominal walls synchronously with the movements of respiration. It can hardly be doubted that, as compared with the caustic treatment for the production of adhesions, Simon's method is preferable.

3. The lesser degree of reaction upon the general health, and the smaller amount of painfulness, as compared with Recamier's plan.

4. The shorter duration of the treatment prior to the opening of the sac—ten to fourteen days after double puncture the sac may be incised, whilst in some cases under caustic many weeks or even months may elapse before a free exit is procured.

A modification of Simon's procedure was practised in one recorded case by Boinet. A large cyst of the liver was treated by canule-à-demeure, the patient soon showing dangerous symptoms of septicæmic poisoning, apparently due to decomposition of the contents of the sac and imperfect drainage. To relieve the patient Boinet removed the canula, and passed along its track a strongly curved trochar, so as to make a counter-opening into the sac; through this canula he transmitted an india-rubber drainage tube, the two projecting ends of which were secured together outside the abdominal wall; in the course of a few days, feeling assured that adhesions had formed, he divided the tissues between the outlets of the drainage tube.

It cannot be denied that Simon's operation represented a decided advance upon Recamier's method, but still it left much to be desired. Simon thought that radical operation was not permissible in recent cases of hydatid disease, and that it should be performed only when the tumour had attained a considerable size, or when suppuration had taken place; he regarded old cysts, with rigid walls, as those particularly suited for his method of treatment. Uterhart, however, considered that all cases of echinococcus cysts that could be satisfactorily diagnosed, were fit cases for this operation.

Objections to Simon's Operation.

1. Suppuration of the cyst-contents, with resulting pyrexia, &c., seems to be an invariable accompaniment of Simon's operation; the temperature usually ranges from 100·4° to 102·4°, and continues until the sac is incised; it has been attributed by Wolff (*loco cit.*) partly to

the peritonitis excited by the irritation of the canulæ, but as it generally subsides soon after incision of the cyst, it is more probably due to the retention of suppurated cyst-contents. It is acknowledged by most writers who have advocated this method, that suppuration, if not an essential element of it, at least is its constant accompaniment; occasionally attempts have been made to treat the cases by antiseptic precautions, but usually, if not invariably, this has failed, for the sac has generally suppurated, or adhesions have not formed.

As an example of the extreme difficulty met with in the attempt to carry out Simon's method with Listerian precautions, I may cite briefly a case treated in Volkmann's *clinique* at Halle, and recorded by Ranke (*Berl. Klin., Wochensch.*, Nov. 9, 1874, page 565). In this instance, a hydatid cyst of the liver was first punctured by an exploratory trochar under strict antiseptic precautions, and normal, clear, non-albuminous, hydatid fluid escaped; an attack of urticaria followed; five days later two canulæ were introduced, also with antiseptic measures, after the escape of 1500 grammes of light-yellowish, clear fluid, containing traces of albumen, the canulæ were plugged with carbolised wax; Lister's dressing was applied and continued for six days; the canulæ were then removed and replaced by a silver sound for three days. During the whole of this time the temperature remained normal; then continuous pyrexia, with increase in size of the tumour, came on. Seventeen days after puncture incision was performed, and it was found that the omentum, which was adherent to the parietal peritoneum had to be divided in order to reach the cyst, and yet in this case suppuration took place; and notwithstanding this, when the sac was incised, it was found necessary to stitch it to the abdominal wound. As an indication of the pains taken in the treatment it may be stated that no fewer than four dressings daily were employed for some time; Ranke naturally points out that this would be impracticable in private practice.

2. Trendelenburg (*loco cit.*), who had enjoyed special opportunities of witnessing and practising Simon's method at Rostock, remarks that it was not found to be satisfactory, because it could not be depended upon to procure adhesions, at any rate to a sufficient extent to make the subsequent incision safe eight days after the insertion of the canulæ. Indeed, he attributes Simon's success in obtaining adhesions to his use of non-disinfected canulæ, in consequence of which a rapid decomposition of the cyst-contents took place, and this evoked adhesive inflammation between the sac and the parietes, and Trendelenburg found that by the strictly antiseptic use of this method, the adhesions were so

imperfect at the time of incision that it was found necessary to stitch the sac to the parietes.

The Results of Simon's Operation.—I have been able to collect only 24 cases in which this method of treatment was adopted; in 21 of them the parasite was situated in the liver, in 3 in the spleen.

Liver Echinococci Treated by Simon's Method.—Out of the 21 cases, there were—cures 10, deaths 10, result not stated 1 case. As regards the fatal cases, one died, not from the operation or the parasite, but from dysentery which was, at the time, prevalent in the Hospital where the patient was treated. Peritonitis was the immediate cause of death in more than half, *i.e.*, in five instances; in some of them it is expressly stated that when the incision was being performed it was noticed that the adhesions were very imperfect, and it is probable that, in most of the cases in question, the peritonitis was caused by imperfect closure of the peritoneum, and consequent escape of the fetid contents of the cyst into the abdominal cavity. Septicæmia was the cause of death in two cases; in one it was associated with erysipelas, in the other it was largely due to the slow and imperfect evacuation of the putrid cyst contents. In one case, recorded by Fiedler (*Deutsch. Archiv. fur Klin. Medic.* 1869), the patient died of collapse immediately after injection of the sac.

Hydatids of the Spleen Treated by Simon's Method.—In one case, reported by Uterhart, two fine trochars were inserted into the tumour in the usual manner, but when the bridge of tissues between the punctures was incised, it was discovered that some intervening coils of the intestine had been cut, and that the canulæ had penetrated only one centimetre deep into the sac; the cut intestine was sutured, and the patient recovered both from his hydatid and the operation. Perhaps no case could more clearly demonstrate the drawbacks of Simon's method than this one does. A second case by Wilde (*Archiv. fur Klin. Medic.*, von Ziemssen, VIII.) recovered, but the fistula did not entirely close for 16 months. A third case, recorded by Wolff (*Berl. Klin. Wochenschr.* 1870, No. 5, page 56), died 25 days after the operation, of pyæmia.

The general results of Simon's treatment in the published cases that I have met with, are therefore by no means good, as the following summary shows:—deaths, 11; cures 13 cases. One of the deaths (No. 8, see Table) was not due to the parasite or the operation.

ECHINOCOCCUS CYSTS TREATED BY SIMON'S METHOD OF DOUBLE-PUNCTURE FOLLOWED BY INCISION—CURES.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Simon. Deutsche Klinik. No. 43, Oct. 27th, 1886, p. 388.	M.	35	Large echinococcus in right hypochondrium.	Punctured, and cannula left in; 41 pounds of clear yellow fluid escaped; cannula plugged; plug removed twice daily; pus appeared in a few days; cannula removed and channel dilated by sponges; rigors, pyrexia, and bronchial catarrh came on. A month after the first cannula, a second was inserted, 2½ centimetres distant; next day incision.	After the incision abundant discharge of stinking pus and cysts. Iodine injections and rapid improvement. A fistula discharging a little pus remained for about a year.	Cured. In about four months he left the hospital.
2.	Simon. Cited by Uterhart. Berlin Klin. Wochenschrift, 1868.	F.	10	Liver.	Simon's double-puncture method; fourteen days later, incision.	Fistula closed in about three months.	Cured.
3.	Simon. Cited by Uterhart. Loco cit.	F.	9	Liver.	Simon's method.	—	Cured.
4.	König's case cited by Wolff. Berlin Klin. Wochenschrift, January 1870. No. 6.	M.	24	Right lobe of liver. Peritonitic rab audible over the tumour.	Simon's method. Fluid became purulent and contained vibrios; gas formed in the sac. The respiratory play of the cannulae ceased on the fifth day; seven days after the punctures, incision; stinking pus and decomposed mother-cyst removed; permanganate of potassium injections.	Moderate evening pyrexia, once reaching 104°, followed the operation.	Cure in about four months.
5.	Ranke. Berlin Klin. Wochenschrift, 1874. No. 46.	F.	23	Liver.	Exploratory puncture was followed by urticaria. Fluid clear. Two cannulae were inserted and tied in under antiseptic precautions. Incision 17 days later; sac-wall stitched to parietal wound; mother-cyst escaped on 4th and 5th day; antiseptic injections used.	Carbolic acid poisoning caused by the injections, so permanganate of potash used. Four dressings daily were needed!!	Cured.

ECHINOCOCCUS CYSTS TREATED BY SIMON'S METHOD OF DOUBLE-PUNCTURE—FOLLOWED BY INCISION—CURES—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
6.	Trendelenburg and Thierfelder. Cited by Madeburg. Beiträge Mecklenburgischer Aerzte zur Lehre von der Echinococcen-Krankheit. Stuttgart, 1885. No. 85.	M.	39	One cyst in the right; another in the left lobe of the liver.	Trochar inserted and tied in; four days later, second trochar tied in; three days later, incision between the punctures; three weeks later, incision of the second (suppurated) cyst.	Patient jaundiced and much exhausted before the operation.	Cured.
7.	Gies. Cited by Madeburg. Op. cit. No. 91.	M.	27 to 30	Liver.	Simon's method.	—	Cured.
8.	Trendelenburg. Cited by Madeburg. Op. cit. No. 93.	M.	48	Liver.	Simon's method.	Copious escape of bile for several weeks. Fistula remaining at time of discharge from hospital. Carcinoma in the cicatrix two years after.	Death from cancer.
9.	Trendelenburg. Cited by Madeburg. Op. cit. No. 95.	M.	32	Liver.	Double-puncture according to Simon's plan; five days later, incision.	It was found necessary to stitch the cyst to the parietal wound, for the adhesions were incomplete. Fistula left for some weeks.	Cured.
10.	Mally. Cited by Madeburg. Op. cit. No. 123.	M.	43	Liver. Occasional fugitive attacks of jaundice.	Simon's double-puncture; incision on seventh day; salicylic injections; drainage.	Diagnosis made eight years before operation. Suppuration continued for nine months after the operation.	Cured ultimately.
11.	Daniel. Cited by Madeburg. Op. cit. No. 138.	M.	60	Large echinococcus of liver. Jaundice and dyspeptic symptoms.	Simon's method.	Improvement, but apparent relapse.	Unknown.
12.	Uerhart. Berl. Klin. Wochenschrift, 1890. No. 4, p. 35. Cited by Mosler. Op. cit., p. 37.	F.	(?)	Spleen. Left hypochondrium.	Exploratory puncture yielded pus. A second trochar inserted $\frac{1}{4}$ centimetres distant from the first one, and both left in. Incision between the punctures.	When the incision was made, coils of intestine presented at the wound and were divided; the cyst could not be found, being pushed laterally. The intestinal fistula was stitched successfully.	Recovery after the puncture alone.
13.	Wilde. Archiv. für Klin. Medizin. v. Ziemssen. VIII., p. 116. Cited by Mosler. Op. cit., p. 25.	F.	11	Spleen. Left hypochondrium.	Puncture was followed by pyrexia, pain, and vomiting; Simon's operation eight weeks later.	Recovery slow, but complete. The fistula did not entirely close for sixteen months.	Cured.

ECHINOCOCCUS CYSTS TREATED BY SIMON'S METHOD OF DOUBLE-PUNCTURE FOLLOWED BY INCISION—DEATHS.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &C.	OPERATION.	REMARKS.	RESULT.
1.	Reuter. Cited by Madelung. Beiträge Mecklenburgischer Ärzte zur Lehre von der Echinococcen-Krankheit. No. 92.	M.	47	Large cyst in right lobe of liver. Left lobe enlarged. Imperfect adhesions in neighborhood of the punctures.	Exploratory puncture established the diagnosis. Simon's method: the trochar did not move with respiration, and hence adhesions were assumed to exist. Incision next day.	Adhesions only partial. Peritonitis as a direct result of the incision.	Death from peritonitis in two days.
2.	Trendelenburg. Cited by Madelung. Op. cit. No. 98.	F.	28	Very large unilocular cyst of liver.	Exploratory puncture. Double puncture by Simon's method; the cannule escaped from the cyst, owing to the plugs of wax coming out; cyst gradually refilled; adhesions assumed to be present, so incision on 8th day.	Pregnancy present. At the time of the incision the adhesions were found to be so imperfect that stitches had to be used, and even then some of the decomposed fluid escaped into the abdomen.	Death from peritonitis, two days after admission.
3.	Beumer. Die Fülle von Echinococcus, &c. Inaug. Dissert. Greifswald 1872. P. 10. Operated on by Hueter.	M.	36	Echinococcus cysts in left lung, in spleen, peritoneum, & liver. A superficial one in the liver was operated on.	A cyst in the hypogastric region was tapped, and cannula left in; injections used. Patient was apparently cured in three months, but was afterwards re-admitted with a large cyst in the right hypochondrium; this was treated by Simon's method.	Erysipelas came on. P.M. Chronic peritonitis; old and recent double pleurisy.	Death. Septicæmia.
4.	Beumer. Die Fülle von Echinococcus, &c. Inaug. Dissert. Greifswald 1872. P. 10. Operated on by Hueter.	F.	33	Right hypochondrium.	Simon's method; on third day incision; irrigation of sac; escape of membranes, blood-clots, and bile afterwards.	P.M. Peritonitis; double phlegmonous oophoritis; recent right-sided pleurisy, &c.	Death 14 days after operation.
5.	Fiedler. Deutsches Archiv für Klin. Medizin, 1868.	F.	50	Right hypochondrium.	Long needles inserted, and retained for two days, with the object of causing adhesions; apparently unsuccessful, so two cannule introduced. Patient became collapsed and erysipelatous; inflammation took place about the punctures. On 7th day incision between the trochar punctures; injections, sponge and laminaria tents.	The patient was very prostrate after the operation. Discharge fetid at first, but became less so as the hydatid membranes escaped. The patient died in a state of collapse, immediately after an injection.	Death. Collapse.

ECHINOCOCCUS CYSTS TREATED BY SIMON'S METHOD OF DOUBLE-PUNCTURE FOLLOWED BY INCISION—DEATHS—CONT.

No.	REFERENCE	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
6.	Siekring. <i>Lancet</i> 1869. Vol. 1, p. 637.	M.	17	Large suppurating hydatid in right lobe of liver.	Puncture with hypodermic syringe, and then with a large trochar, which was tied in and plugged; pus and small cysts escaped. On 15th day incision; offensive pus and cysts. Carbolic injections.	Imperfect evacuation of sac. P.M. Double pleurisy. Contents of sac putrid. (Practically, but not precisely Simon's method. J.D.T.)	Death on 43rd day. Septicæmia.
7.	Schultz. Cited by Madlung. Op. cit. No. 122.	F.	13	Three separate cysts at lower edge of liver.	Double puncture with incision for two cysts was well borne. Third cyst about to be operated on.	Convalescence for 26 days, when peritonitis came on, and proved fatal in five days. Probable cause suppurating and rupture of the third cyst. No P.M.	Death. Peritonitis.
8.	Freilich. Cited by Meyer.	F.	55	In right lobe of liver.	Repeated punctures: canule-demeure; salicylic and thymol injections; second trochar tied in. Incision on 8th day; strong adhesions present. Free drainage and antiseptic injections.	Patient died of dysentery, which was prevalent at the time in the Hospital.	Death, not due to operation.
9.	Hinkeldey. Cited by Madlung. Op. cit., p. 130. 1873.	M.	53	Hydatid of liver and pericardium.	Simon's method.	Death, seven days later, of peritonitis and peritonitis.	Death.
10.	Schreiter. Cited by Virchow and Hirsch. Jahresbericht 1885. Vol. 1. p. 202.	M.	35	Two cysts of liver.	Iodine injections tried without success; then Simon's method with a galvanic-caustic loop.	Seven years before Schröter had treated another cyst in the same patient, by puncture and iodine injections; this was cured. Death attributed to injudicious conduct of the patient.	Death.
11.	Wolff in Berlin Klin. Wochenschrift. No. 5. p. 56.	M.	20	Spleen. Large tumour in left hypochondrium. Notch of spleen felt. Liver separable from the tumour.	Exploratory puncture, clear fluid. Double puncture followed 13 days later by incision; much foetid purulent fluid; mother-cyst partly removed by forceps. Permanganate of potash injections twice daily.	At first satisfactory progress. Later on rigors, pyrexia, pyemic abscesses; pneumonic jaundice. Hemorrhage from sac. Imperfect evacuation of contents of sac.	Death 25 days after the operation, from pyæmia.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, MARCH 6TH, 1889.

(Hall of the Society, 8 p.m.)

Present :—Dr. Balls-Headley (in the chair), Drs. Armstrong, E. W. Anderson, Bage, Barrett, Bennie, F. D. Bird, Barker, Burton, Courtenay, Coane, Dyring, Duncan, Fetherstonhaugh, A. A. Fletcher, Joyce, Howard, Hodgson, Girdlestone, Grant, McGibbon, Maudsley, Jamieson, Nichol, Neild, Steven, and Reid.

The minutes of the preceding meeting were read and confirmed.

The following were elected Members of the Society :—Peter Lynch, L. et L.M.R.C.P. et L.R.C.S. Ed., L.F.P.S. Glas., of Carlton, proposed by Dr. J. W. Barrett, and seconded by Dr. Webb; George Palmer, M.B. Melb., of Ararat, proposed by Dr. Armstrong, and seconded by Dr. Barrett; Max Wall, M.D. Munich, of Colac, proposed by Dr. Jonasson and seconded by Dr. Syme.

The President moved and Dr. Jamieson seconded the following resolution, which was carried unanimously :—"That a letter be given to Dr. Bowen, empowering him to represent the Medical Society of Victoria at meetings of kindred societies in other parts of the world."

A paper was then read "On Medical Brevities on Recent Observations," by Dr. John Reid, which we are compelled by want of space to hold over.

The following paper was then read :—

THE DISINFECTION OF TYPHOID STOOLS.

By JAMES JAMIESON, M.D.

I do not know that there is practically any difference of opinion among pathologists, that the infecting material in cases of typhoid escapes from the body chiefly, if not solely, in the discharges from the bowel. If it were thrown off in the breath, or from the skin, as in some other diseases, we could hardly fail to get clearer evidence, than most of us can find, of direct spread of infection from person to person. There is also, I think, similar agreement that measures of precaution against the spread of the disease must consist mainly in rendering the intestinal discharges innocuous. If that could be consistently carried out in every case for two consecutive seasons, and less would hardly suffice,

there can scarcely be doubt that the disease might be stamped out in any given town or district. Facts seem to show that the infecting material can remain for a considerable time in some suitable nidus outside of the body and, obtaining admission to the system of some susceptible person, can again produce the disease. It is because of the difficulty, perhaps the impossibility, of securing that the whole discharges, in every case, shall be rendered innocuous, that general sanitary precautions are indispensable if the disease is to be kept in check. How effectual the general adoption of these may be, in lessening the prevalence of typhoid, is proved by the steady diminution in the mortality caused by it of late years in England. How ineffectual, on the other hand, are mere special precautions, taken directly against the infecting material in the discharges, might be taken as shown by experience in Melbourne, where for some years we have had it continually dinned in our ears that typhoid stools should at once be disinfected. There can be no doubt, I think, that attempts are made, in the majority of cases, to disinfect the discharges, but with what poor results the annual death returns show. It is, of course, true that in most instances these attempts are of the most crude and insufficient kind ; and so difficult indeed is the problem, that I fear we will not see a great and continuous reduction in our typhoid mortality, until we have a complete change in the system of night soil collection and removal. To my mind, the best and most effectual change will consist in the adoption of a system of underground drainage, with water carriage of excreta, and the adoption of an irrigation method for its disposal. But, pending the carrying out of that great and necessary work, we are thrown back on the use of direct disinfecting measures, which indeed would not cease to be necessary, though it were completed.

The first thing wanted is a proper recognition of the difficulty of the task, and rather a large and varied acquaintance with the processes commonly adopted compels me to believe that such recognition is by no means general. An illustration of the practical difficulty of thorough disinfection may be seen in the elaborate procedures, which surgeons find to be needed, for properly cleansing a sponge which has become tainted with septic matter. And I venture to say, that the disinfection of fæcal matter is an even more difficult problem, on the supposition, of course, that the germs or spores to be destroyed are equally resistant in the

two cases. For the sake of certainty we must assume that the faecal discharges of a typhoid patient may or do contain the germs in the most resistant form known, and that any agent, used for their destruction, must come into actual contact with them, in at least the strength which has been found necessary in laboratory experiments.

Though the list of disinfectants is now a very large one, it must be admitted that comparatively few of them are really available for every day use, as being at once cheap, safe, and efficient. When we have mentioned carbolic acid, muriatic acid, sulphuric acid, sulphate of iron, sulphate of copper, and corrosive sublimate, the list may be taken as almost complete.

Another agent not yet mentioned, but very commonly in use, must be excluded on the ground of inefficiency. I refer to permanganate of potash, and though it is largely used, and was recommended by Murchison, I must venture to condemn it as unreliable. It is, of course, a powerful disinfectant, when used for the destruction of germs in a weak solution, but its use for disinfecting such matters as faecal discharges is based on a fallacy. When added, even in comparatively small amount, it quickly destroys all offensive smell, and as a deodorant it has perhaps no equal. But its merit in this respect is also the ground of its disadvantage. It destroys almost all kinds of organic matter, by giving up to them its own active oxygen, but in doing so, it becomes itself inert. Its oxygen is most easily and quickly appropriated by the organic compounds which are most unstable, such as the products of decomposition. On these, therefore, it expends its strength, and, unless it is added in very large amount, the more stable organic matters are left unaltered, and among these, bacteria and their spores must be regarded as not the least resistant. A good many years ago a calculation was made by Dr. Dougall, of Glasgow, of the quantity of Condyl's fluid which would be required to oxidize the organic matter in the stools of a typhoid patient, and the conclusion arrived at was, that the cost would be nearly a pound a week. Of course, a very much cheaper substitute can now be got by adding sulphuric acid to the commercial manganate of soda, but this is an operation which cannot well be carried out in private houses. While, therefore, the permanganates are valuable for deodorising purposes, they cannot be credited with practical usefulness as disinfectants of such matters as typhoid excreta. They have this disadvantage, even,

that their prompt action in banishing unpleasant odours is apt to give them credit for more than they deserve.

The mineral acids are powerful germicides, acting on most forms of bacteria in a destructive way, in the strength of about 1 to 1500 or 2000. But when used for disinfecting excreta, they would be utterly useless in any such diluted condition. They would be liable to be neutralised, to a large extent, by the biliary and other salts of soda and lime, and so would probably require to be added in large amount, in not less concentration than one per cent. It would hardly be safe to keep in an ordinary household strong muriatic or sulphuric acid in quantity. And there would be the further disadvantage, that if long used they would be destructive to night pans and other receptacles. About their cheapness and effectiveness, under suitable conditions, there may be no doubt, but the objections just mentioned must stand in the way of their common use.

Sulphate of iron has a long standing reputation. The comparative immunity from cholera, which Birmingham enjoyed, was ascribed to the free use of solutions of this salt for flushing and cleansing purposes. It is not really a very powerful germicide, having been found to destroy the cholera microbes only in strength of about 1 to 30, in some period under half an hour. I doubt if it could be trusted, therefore, to disinfect typhoid stools, unless used in very large quantity. As a deodorant it may be very useful, and few things are better or cheaper than a mixture of dry earth and powdered sulphate of iron.

Sulphate of copper is much more powerful, and has of late obtained a high reputation as an antiseptic. It was found to be as effective, in destroying the comma bacillus, in the strength of 1 to 600, as sulphate of iron was in a 1 to 30 solution. It might probably be used with advantage much more than it is, being cheap, and at least as safe as most agents equally efficient.

Perchloride of mercury is now recognised as perhaps the most powerful of germicides; and, with proper precautions, it might be more largely used. But there are disadvantages, which make its general applicability doubtful. When mixed with fæcal matter it is likely to meet with albuminous substances, with which it may form an insoluble compound, and so become practically inert. It would require, therefore, to be used in very much stronger solution than is found sufficient in the laboratory, or even for surgical dressings. It may be doubted whether a solution of less strength

than one per cent. would suffice ; and most of us would hesitate, I think, before giving directions to have large quantities of such an active poison always at hand, and all the more that a solution would not have very distinctive properties, obvious to sight or smell. I venture the opinion, therefore, that corrosive sublimate is not adapted for common use as a disinfectant in typhoid cases.

Carbolic acid, after many trials, and in spite of doubts about its efficacy, remains the great and popular disinfectant. To ensure a good result, however, it must be used in considerable strength, apparently not less than five per cent. According to some experimental observations, indeed, a strength of ten per cent. is required for the complete destruction of the spores of certain pathogenic bacteria. The great practical disadvantage about carbolic acid is its very slight solubility in water ; and I have been in the habit of recommending phenyl as a substitute. It is of about equal potency, and mixes in all proportions with water, forming a very permanent emulsion. It is cheap, too ; and, from its appearance and smell, is not likely to be mistaken for anything else. A convenient way of using it is to dilute the phenyl with nine parts of water, making a ten per cent. solution, and adding of this a quantity equal to the whole contents of the bed pan or night vessel. Though carbolic powder is so much used it must not be greatly trusted to. It is seldom of greater strength than five per cent., and could hardly therefore be added in amount sufficient to secure efficient disinfection.

Taking the various substances enumerated, with their mixed advantages and disadvantages, I am still inclined to hold that phenyl, for use in the average household, has manifest points of superiority. The maximum of practical advantage is to be got, I think, in the following way :—A couple of ounces of diluted Condyl's fluid should be put into the bed pan or other vessel, before it is used, simply to destroy the offensive smell. Immediately on its removal from the room there should be added an equal quantity of ten per cent phenyl, or two per cent. solution of sulphate of copper, and the whole put into the night pan, unless there is some other mode of disposal. All fermentation and evolution of gas will thus be stopped ; though, for further precaution, it may be advisable to add extra quantities of the phenyl, if the closet is used by other persons. If the excreta are buried, they should be completely covered with fresh lime, which

has a powerful destructive influence on every kind of bacteria, and indeed, on all kinds of organic substances.

If the measures here recommended could be thoroughly carried out, there need be no reasonable doubt, that much good would result, in limiting the spread of typhoid. The infecting agents would be to a large extent destroyed, or, if not, their growth would certainly be checked, and so the excreta would not be a source of danger, either by their mere retention in the neighbourhood of houses, or by accidentally finding admission to drains or street channels. It is our duty to do all we can to secure thorough disinfection now, and it would not cease to be a duty, though perhaps a less urgent one, even if we had proper drainage.

Dr. NEILD was one of the Exhibition Jurors, and had been much struck with the absence of scientific knowledge displayed by the exhibitors of disinfectants; about half of them consisted of carbolic acid in various forms, mixed with saw-dust, sand, &c., some of them consisted of sulphate of iron; none contained bichloride of mercury. He would be glad to hear from Dr. Jamieson, his opinion of the value of eucalyptol and peroxide of hydrogen as disinfectants.

Dr. REID thought highly of soap and water. He thought that soap and water was an excellent disinfectant.

Dr. J. P. RYAN preferred lime as a disinfectant, it is cheap and easily procurable. Phenyl is, however, also cheap and easily miscible with water. He advised his patients to have the typhoid excreta buried in a hole in the yard, and to cover with lime and bury them. He totally disapproved of the use of soap and water; the less water used in the matter the better. Further, the water used in cleansing utensils should be at boiling temperature.

Dr. E. W. ANDERSON would like to know what is the actual value for practical purposes of chloride of calcium, and also of saluter, which is said to be as powerful a disinfectant as bichloride of mercury, and to be but slightly poisonous.

Dr. NICHOL preferred phenyl to other disinfectants, but pointed out that the excreta and the disinfectant must be thoroughly mixed. There could be no doubt that a very large quantity of typhoid excreta is never seen by any doctor.

Dr. HODGSON thought destruction by fire would be the best and cheapest mode of getting rid of the excreta.

Dr. McGIBBON said that many of the poorer families in the community have no yard, and consequently cannot bury the excreta. He recommended such people to disinfect with phenyl, and then burn; but he realised the fact, that it is not easy to burn them.

Dr. GRANT referred to the possibility of disinfecting the intestinal contents, whilst still in the intestine. The difficulty is to administer efficient antiseptics which will not injure the patient. Naphthaline is a powerful antiseptic, and but slightly poisonous.

Dr. BAGE pointed out that gas-stoves are so generally used in private houses for cooking purposes, that fuel is not available in summer to destroy excreta.

Dr. DYING said that burial is ineffective as a means of disinfection, but that boiling would be efficient.

Dr. BENNIE had used phenyl for five years as a disinfectant, and apparently with excellent results. He referred to the danger of spreading the disease by burial of the excreta.

Dr. COANE referred to the use of chloride of zinc.

Dr. BARRETT said antiseptics were practically but two in number—bichloride of mercury and carbolic acid—and of these, carbolic was much the cheaper and safer.

Dr. BALLS-HEADLEY said that Melbourne wanted a new system of drainage, but, until it was supplied, disinfectants must be used as much as possible. There must be a great deal of typhoid excreta evacuated before the doctor sees the patient, and consequently typhoid excreta is deposited all over the city. With regard to disinfectants there were but few, the boiling temperature, or chloride of mercury gr. x. to $\frac{1}{2}$ j., or carbolic acid. Phenyl is an impure, patent preparation of carbolic acid. Permanganate of potash is a deodorant, and eucalyptol a weak disinfectant. At present excreta is carried to market gardens, and the odour, arising from these gardens during burial, is evidence of the absence of anything approaching disinfection. It is possible that the disease is propagated by the vegetables.

Dr. JAMIESON, in reply, said that at present it is impracticable to disinfect all the typhoid stools, and until we have a system of drainage which provides for the rapid removal of excreta, he did not think typhoid fever will diminish in frequency. He did not think there was enough corrosive sublimate in this city to disinfect all excreta for one week. Mere burial does not kill

the typhoid virus, and no stools should be buried unless thoroughly disinfected. Boiling the stools is impracticable in the yard of an ordinary house, so is burning them. In determining which antiseptic is to be used, the questions of cost, utility, and safety, must be considered. Chloride of lime is a good antiseptic, but an unpleasant one. One to two pounds mixed with a quart of water makes an efficient mixture to place in the night-pan. The peroxide of hydrogen was a valuable deodorant, but too expensive to be used as a disinfectant.

EXHIBITS.

Dr. BALLS-HEADLEY then exhibited "a spleen which he had removed from a young woman," and about whose case he gave the following account:—The spleen weighed 10lb. 3oz., and was removed on January 31st. The patient was neither malarial nor leucocythemic. The specimen appeared to be a simple enlargement, but would be further examined. The patient was not doing well.

Dr. J. P. RYAN then exhibited "a new form of catheter, with screw cap and guide," and about which he gave the following information:—It consists of two parts, a silver catheter and a fine filiform bougie of whalebone or gum elastic, as a guide. The catheter tapers from No. 6 at its middle, to No. 1 at the point. The point is a cap which can be removed, and the guide screwed on in its place. The catheter, on account of its pyramidal shape, can, with a little patience, be got through almost any stricture that will admit a No. 1 or 2. There are few cases of stricture so tight or so tortuous as to prevent the passing of the bougie guide, and when this has been effected the catheter may be screwed on to it and passed into the bladder, the guide curling up before it, and lying harmlessly in the viscus. I have no doubt that in very tight strictures it will prove serviceable. In some such cases I have succeeded with difficulty, perhaps, in passing a $\frac{1}{2}$ No. 1 bougie, I have allowed it to remain in the urethra for a short time, and have withdrawn it intending to pass a larger one, and ultimately a catheter, but I have failed to again hit off the passage, and have been obliged to resort to other measures to relieve the patient's bladder. Mr. Jackson, of Mayer, Meltzer, and Jackson, of this city, got it made for me at their London house. At the time I did not know that Mr. Teevan was the originator of a somewhat similar instrument. His is an ordinary

No. 7 gum elastic catheter, with a guide screwed on. I can understand that, though the guide might be got through a tight stricture, there would be great difficulty in following it up with the catheter, on account of the abrupt enlargement of the latter, and the softness of the material of which it is constructed. These two great disadvantages are absent in the instrument devised by me, which tapers gradually from No. 6 to No. 1, and the point and catheter portion, being of unyielding material, can be made to follow the guide. The extremity of the catheter from the rings is slightly curved downwards, to facilitate an easy flow of urine into a vessel held between the patient's legs, when he is in the recumbent posture.

Dr. BARRETT exhibited for Mayer, Meltzer, and Jackson, "a new form of flexible catheter, with solid point, which does not permit of the lodgment of fluid, and can be perfectly and easily cleaned."

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MEETING.

Wednesday, 27th February, 1889.

(Hall of the Medical Society, 8 p.m.)

The President, Dr. Fishbourne, occupied the chair, and there was a good attendance of members.

The minutes of the previous meeting were read and confirmed.

NEW MEMBERS.

The election was announced of G. T. Howard, M.A., M.D., B.S. Melb., of North Fitzroy, and W. B. Walshe, M.D. Dub., F.R.C.S.I., of Kew.

EXHIBIT.

Mr. G. A. SYME exhibited a female patient, aged 20, with a marked swelling of the right side of the face, causing considerable deformity, and with papillomata studded over the labial and buccal mucous membrane of the same side. The swelling was caused by a diffused, solid, doughy thickening of the cheek, the skin and the maxillary-bone being normal. Her mother stated that both the papillomata and swelling had existed since birth.

When four years old some of the papillomata were removed, the operation was followed by erysipelas of the face, and since then she has been subject to inflammatory attacks in the swelling. Menstruation has been regular, and there is no change in the swelling during the menstrual period. There was absolutely no indication or history of hereditary syphilis, and no history or sign of struma. When first seen the cheek was more swollen, red, hot and painful, but the temperature was normal. Under mild anti-phlogistics, the swelling and redness subsided. Mr. Syme believed the condition to be due to some obstruction in the lymphatic circulation, and to be allied to elephantiasis, or those "giant conditions" seen in *pes gigas*, &c. Possibly the lymphatic spaces are dilated, forming a sort of lymphangiectasis—a mild form of lymphatic nævus. There has apparently never been any lymphorrhœa. Though it is well-known that papilloma may be congenital, it is not very often so. These localised elephantoid conditions are almost always congenital.

Dr. Cox referred to a case which had come under his notice, of papillomata growing from the mucous membrane of the hard palate. There was no evidence of disease of the bone. The papillomata were removed. Within three months the patient returned with signs of malignant disease of the jaw, which necessitated removal of both jaws.

Dr. NEILD asked what remedial measures Mr. Syme proposed to make use of.

Mr. MICHAEL FOSTER (a visitor) said that he had seen one case of lymphatic nævus of the cheek, which, however, did not resemble this one, being a cutaneous nævus rather than sub-cutaneous. He suggested that possibly the attack of erysipelas might have had something to do with the causation or exaggeration of the condition, a condition being brought about similar to that seen in the limbs—the lymphatic œdema of Liston.

Mr. SYME, in reply, pointed out the congenital origin of the condition, and the absence of any sign of bone affection. He proposed to remove the papillomata, but could not suggest any treatment for the condition of the cheek.

A paper was then read:—"Notes on a Case of Trance Occurring in a Schoolboy." By M. Barclay Thomson, M.B., Physician to the Alfred Hospital. (To be published in the next issue.)

Dr. LE FEVRE considered the case of great interest, though he did not agree with its being one of trance. He was of opinion that it was one of "petit mal," followed by serous effusion. He had seen a similar case. It would be interesting to watch the case for further symptoms.

Dr. Cox agreed with Dr. Thomson in his opinion that the case was one of induced hypnotism.

Dr. MAUDSLEY agreed with Dr. Thomson in his view of the case. It was not often that a case of functional disease (hysteria) was mistaken for one of organic disease, tubercular meningitis, the reverse being more frequently the case, especially in young adults. It seemed as if the higher cortical centres of the brain were in a condition of inhibition, the lower centres were free to work, and, being in a well-trained condition, purposive acts were performed, which, to the onlooker, might appear to be under the direction of consciousness. There was, if one might so term it, sensory recognition, but not psychical recognition. The boy was in the condition the epileptic is frequently in after a fit, or the somnambulist is in when he will perform most delicate and well-balanced movements—his consciousness being all the time in abeyance. He had seen the patient about ten days after the attack. The optic discs were normal, and there was no sign of organic brain disease. He complained of inability to recognise colours, but figures he could distinguish, and he could read ordinary type. This inability to recognise colours, he said, prevented him playing cards, but inability to recognise colours should be no preventive to playing cards, as the cards can be distinguished by the figures. There was evidently a certain amount of mental obliquity. He had once run away from home with the intention of going to sea.

Mr. F. BIRD was of opinion that a little severe counter-irritation might have restored him, in a shorter time, to his normal condition.

The PRESIDENT considered the condition very rare, and of great interest. He had never seen a similar case in a boy of that age. He was of opinion that it was a manifestation of hysteria, and that the boy was in a condition allied to the hypnotic state, and that Dr. Thomson was probably correct in his view with regard to the method of induction. The case was one to watch for further manifestations.

Dr. Thomson replied.

The following paper was then read :—

NOTES ON A CASE OF EAR DISEASE, FOLLOWED
BY INTRA-CRANIAL MISCHIEF.

By JAMES COX, M.D., &c.

Surgeon to the Throat and Ear Department, Alfred Hospital.

The following case, admitted into the Alfred Hospital, may have some points of interest :—

B. G., æt. 26, domestic. Ill for ten months. Caught cold in her ear whilst waiting at a railway station ; about five days afterwards noticed a discharge from the ear, unattended with pain ; this went on for about eight weeks, when giddiness came on, causing her to reel, generally to right side, when attempting to walk. These symptoms continued until Christmas, when she consulted a chemist, who told her to syringe her ear, and for the first time blood was noticed in the discharge. Some time before admission she had been troubled with vomiting, the commencement of which she could not fix. The vomiting was unattended by nausea, and came on without any apparent cause. Her chief complaint was giddiness, and a dull feeling in the head. When examined, she had a purulent discharge from her right ear ; a watch could be heard on contact ; there was a polypus, completely filling the bottom of the meatus. There was no pain or tenderness on pressure over the mastoid. The growth was removed, and on syringing afterwards, some thick cheesy matter came away. From the condition of the middle ear, it was thought that a similar state would be found in the mastoid antrum, and also that the vomiting might be cerebral. It was considered advisable, therefore, to open the mastoid cells. The outside of the mastoid was dense, and free from disease. On opening the cavity it was found to be filled with cheesy matter, large quantities of unhealthy granulation tissue, and carious bone. These were scraped out ; the carious bone was followed carefully inwards, after probing and gouging, avoiding the lateral sinus. At this stage very troublesome venous hæmorrhage occurred, as if the sinus were injured. When this was stopped a fragment of bone was felt loose, and on removal, about two drachms of pus escaped, and the dura mater could be felt in the floor of the middle fossa. An abscess evidently had formed between the dura mater and bone, corresponding to the temporo-sphenoidal lobe ; this was supposed to account for the vomiting. The cavity was thoroughly irrigated with antiseptics, and a drainage tube left in.

The patient expressed herself as much relieved after the operation. The vomiting continued in a milder form, but this was attributed to the chloroform. She did not complain of the giddiness, and her head felt clearer. She appeared to improve until the sixth day, when a screaming fit came on, without warning, and the patient died. The post-mortem showed a large abscess in the right hemisphere of the cerebellum, especially in the under surface; the rupture of this, with hæmorrhage into the sac, was the cause of death. There was also found the remains of an abscess in the middle fossa. The lateral sinus was healthy.

Remarks.—It is remarkable that so much brain mischief should be present with so few symptoms, and with no increase of temperature, and no headache. The giddiness might have been caused by the mastoid disease, or by labyrinthine mischief. The vomiting was the chief symptom that caused suspicion of cerebral disease, and when the abscess was found in the middle fossa this was thought a sufficient cause for both the giddiness and vomiting. But these were no doubt caused by the abscess in the cerebellum, the relief that followed the operation being due to the rest in bed. Her general health being good (she expressed a desire to get up on the morning of the day she died), there was nothing to point to any further lesion of the brain; the unfavourable symptoms coming on quickly and as suddenly ending. The absence of any great pain throughout the illness—for some months previous to admission the patient complaining of only a heaviness about the head, the polypoid growths in the middle ear preventing the cheesy matter from escaping, which kept up an unhealthy condition of the granulations in the cavity. In these conditions, when granulations crowd the middle ear with thick discharge, it may, as a rule, be presumed that a similar state will be found in the mastoid antrum, and no time should be lost in exposing it and removing such deposits as pus, caseous exudation, carious or necrosed bone, with the unhealthy granulation tissue; and in making a communication with the middle ear; and, by syringing, to remove stagnating and putrid secretions, so as to prevent any subsequent affection of the brain or sinuses, especially in strumous subjects. Such conditions often form the starting points or foci, whence tubercular matter may be carried to the lung or elsewhere; and earlier operative measures should be undertaken to prevent the inflammation running into caries or necrosis.

Mr. SYME thought the thanks of the Branch were due to Dr. Cox for bringing forward this case, the importance of which could not be over-estimated. Attention was being directed to the subject everywhere, and many successful cases of trephining for cerebral abscess, secondary to chronic ear trouble, had been now recorded. The general practitioner was far too apt to regard these ear troubles as of little import, and to allow them to be untreated, or imperfectly treated. Another point to be urged was the necessity for a thorough examination of the local condition before resorting to extreme measures. The success attending trephining for cerebral abscess in these cases must not lead surgeons to rashly trephine every case with some obscure symptoms. He remembered a case of a patient with violent pain at the back of the head, high temperature, and rigidity of the muscles of the neck. She had chronic otorrhœa, and it was suggested that she should be trephined for a possible cerebral abscess. The surgeon, however, very wisely insisted on exploring the mastoid cells first. On exposing the bone, pus was found burrowing down among the muscles at the back of the neck, and this evidently was the cause of the symptoms, which disappeared after the pus was drained away, and the mastoid cleaned out. He agreed with Dr. Cox as to the frequency with which the mastoid antrum was involved in cases of chronic inflammatory trouble in the middle ear, and the necessity for early operative interference. Here again it was often difficult to convince, not only the patient and his friends, but also the general practitioner, of the need for this. He had quite recently had a case where he opened the antrum and drained thoroughly, and where the family attendant had urged delay, and evidently thought the operation unnecessary.

Dr. LE FEVRE agreed with Mr. Syme as to the importance of the subject. He should like some statistics to be brought forward as to the frequency of these grave cerebral complications in chronic ear disease. Insurance societies were waking up to the seriousness of chronic otorrhœa, and many would only take candidates at a high premium.

Dr. ROWAN would like to know what were the results of many of these severe operations about the region of the ear, and what percentage were fatal. The position of the lesions rendered operative procedures difficult and dangerous. He should like some statistics on the point.

Mr. KENNY, from his experience as Resident at the Eye and Ear Hospital, had come to the conclusion that many cases of chronic ear disease were allowed to run on until grave cerebral complications supervened. He related a case illustrating the difficulty in diagnosing the cerebral abscess. The case occurred in Vienna. The surgeon had arranged to trephine the next day. In the evening the assistant examined the tympanum, incised the membrane, let out a quantity of pus, and the symptoms all subsided.

Dr. MAUDSLEY remarked on the great interest of the case to the pathologist and the surgeon. He referred to the importance of curing all cases of purulent discharge from the ear by the treatment surgeons adopted in other discharging sinuses or fistulæ, viz., by removing the cause, which was often carious bone or caseating material—the product of chronic inflammation. If that course were pursued, the graver complications would not arise. Dr. Cox's cases, and the pathological specimens he exhibited, illustrated the chief complications, viz., meningitis, septic thrombosis of the lateral sinus, embolic pyæmia, and cerebral abscess. The site of cerebral abscess, secondary to ear mischief, was either the temporo-sphenoidal lobe, or the hemisphere of the cerebellum; in the former position when the tympanum was chiefly affected, in the latter when the mastoid cells were the chief seat of disease. Now, abscesses in either situation were amenable to surgical treatment, therefore it was of the greatest importance to diagnose them. The local symptoms were of little aid in diagnosis, as, unless the abscesses were very large and encroached on other parts of the brain, they would be absent. If the abscess were in the left temporo-sphenoidal, there might be word deafness. The general symptoms were sometimes not well marked, as in Dr. Cox's case. Headache was not always a marked symptom; vomiting was generally present, and optic neuritis. Fever might be absent or present, with or without rigors, apathy deepening into coma towards the end, and often a sudden termination, with high fever and rapid pulse. The presence of optic neuritis was significant, though he had seen one case where there was high fever, delirium following severe headache and vomiting, and optic neuritis. There was a chronic otorrhœa, and the diagnosis of abscess in the cerebellum was made. The skull was trephined over the cerebellum, but no pus was found. The patient died in a few days, and there was septic thrombosis of the lateral sinus, without any meningitis or

cerebral lesion. In another case of chronic otorrhœa the symptoms were an attack of high fever, lasting five or six days, with severe headache and vomiting, then a period in which there were no symptoms except apathy—no fever, lasting about ten days; then another attack of fever, which subsided after opening the mastoid cells; another week without fever, then a rigor, a temperature of 105°, and coma. During the whole time there was progressive optic neuritis. The skull was trephined over the temporo-sphenoidal lobe, and about one ounce of fœtid pus escaped. The patient made a perfect recovery.

The PRESIDENT remarked on the importance of the subject. In Dr. Cox's case, the symptoms, considering the grave amount of disease until the fatal termination, were very slight. This was partly accounted for by the lesion being outside the motor areas and tracts.

Dr. Cox replied, and suggested that the reason that most general practitioners showed such indifference was because they had no instruction in aural work. There was nothing very mysterious or difficult in ear affections, or their diagnosis. He failed to see that the position of the lesions referred to, rendered operations exceptionally difficult or dangerous. He was not aware of any statistics on the subject.

EXHIBITS.

Dr. MAUDSLEY exhibited the following specimens:—

(a) The right temporal bone, and the cerebellum from the case related in Dr. Cox's paper. There was caries of the tympanum and of the mastoid cells, the cells being full of caseating material. The surface of the petrous portion, at its junction with the squamous, was carious, and there was a quantity of caseating material in this position. The dura mater, on its surface, was everywhere normal. The lateral sinus was normal. The right hemisphere of the cerebellum was the seat of an abscess, containing about an ounce of pus. The abscess was on the point of rupturing on the surface of the cerebellum. Into the abscess cavity, hæmorrhage had taken place. There was no direct line of communication between the diseased bone and the cerebellum.

(b) The right temporal bone and the cerebellum. The roof of the tympanum was carious, and caseating material occupied the mastoid cells. A carious fistular tract led from the upper surface

of the petrous portion along the posterior surface and behind the lateral sinus under the dura mater, and opened below the sinus into the posterior fossa of the skull. In this fossa there was thick lymph of some duration, glueing the right cerebellar hemisphere to the dura mater. At the base of the brain was recent lymph, and in the ventricles a considerable effusion.

(c) The right temporal bone and the right cerebral hemisphere removed from a youth, *æt.* 16 years, who died after an illness of a fortnight's duration. The whole of the periosteum and the dura mater was stripped off the temporal bone, pus occupying the interval. The bone was dead. There was softening clot filling the lateral sinus, and a commencing abscess in the temporo-sphenoidal lobe. The lungs were full of embolic abscesses. The condition was one of acute necrosis of the temporal bone, a condition similar to the acute necrosis of a long bone.

(d) The lungs and the kidneys from a case of acute tuberculosis consecutive to hip-disease, from a child. The hip joint was full of curdy pus. There were no sinuses. There was tubercular mischief of the head of the femur, immediately under the cartilage, much of which was eroded; there was the same condition in the acetabulum. The neck of the femur, the trochanter, and the epiphysial lines were healthy. Mr. Webb's operation, described at the last meeting of the Medical Society, would have sufficed to have got rid of all the tubercular mischief in this case. The lungs were studded with small caseating tubercles. The liver, spleen, and one kidney were similarly affected. The left renal vein was occluded by a firm adherent decolourised thrombus. The kidney was intensely congested, especially the bases of the pyramids.

Messrs. Mayer, Meltzer, and Jackson exhibited a beautiful preparation of the temporal bone, showing the tympanum, mastoid cells, the cochlea and the canals.

We have received from the Melbourne agent of Messrs. Burroughs, Wellcome and Co., a copy of their handy Medical Diary for 1889. As the copies have arrived late, they are offered at 2s. 6d. each, instead of 4s. 6d. An alphabetically arranged materia medica of modern drugs is included in the diary.

Australian Medical Journal.

MARCH 15TH, 1889.

HOSPITAL ACCOMMODATION.

There are certain subjects which arouse public attention for a time, almost at periodic intervals. They seem to lie dormant a while, and gradually gather force, until attention is again attracted to them. Then letters are written to the papers, followed by leading articles, indignation is expressed, and then things once more settle down to the old routine. Such is the case with the condition of the Melbourne Hospital. For years complaints of its inadequacy have been periodically made, and yet it remains pretty much as it was. No one appears to deny that the present buildings do not supply sufficient accommodation, or that they are not exactly a model of hospital construction, but nothing is done to improve matters. Complaints made to the General Committee, are referred to the Building Committee, and there is an end of them—they are quietly shelved.

It may not be uninteresting to compare the hospital accommodation of Melbourne with that of large towns in Great Britain. We are informed that the Melbourne Hospital has 299 beds, the Alfred Hospital 144, the Homœopathic 60, the Children's Hospital 70, the Infirmary department of the Women's Hospital 25, giving a total of 598 beds to a population of 390,000, or one bed to every 652 of the population. We find that in Dublin the accommodation is one bed to every 140 of the population, Belfast has one to 380, Edinburgh one to 410, London one to 420, Birmingham one to 700, Sheffield one to 830. Thus Melbourne, while far behind the capital cities of England, Scotland, and Ireland, in the matter of hospital accommodation, is ahead of leading English provincial towns. It must be remembered, however, that these figures do not include the beds in the poor-law infirmaries, which take in a large number of serious and urgent cases in Great Britain.

The most conclusive evidence of the insufficiency of Hospital accommodation in Melbourne is the fact that serious cases have daily to be refused admission for want of room. The Superintendent of the Melbourne Hospital informs us that, from February 25th to March 12th, 52 patients were refused admission for want of room; and the Resident at the Children's Hospital states that it is also overcrowded, and that 15 cases of typhoid fever were refused last week. The Alfred Hospital has for the past three seasons provided beds in tents for 20 to 30 patients.

It would be very easy to say some hard things about such a condition of affairs, but we refrain. Surely the simple facts speak with sufficient eloquence. Fifty-two patients deserving admission turned away from the doors of the Hospital in a fortnight, simply from want of room! But this is not the worst evil. The mortality returns of the Melbourne Hospital are exceptionally high, nearly 17 per cent of the cases treated die. In England and Wales the percentage is only about 11; and in the German Empire only 7. The explanation probably is, that patients cannot gain admission to the Melbourne Hospital until their condition is so exceedingly urgent that many of them are then past help, who, had they been admitted earlier, might have recovered.

The present state of affairs is simply a disgrace to the community, and we can only repeat what has always been urged in this Journal, that the Melbourne Hospital must be rebuilt on another site, and that the best site that could be obtained would be that now occupied by the Corporation Horse and Pig Market. We are confident that when the public are made fully cognisant of the urgent necessity, the funds will be forthcoming; in fact, nearly all that would be needed would be obtained by the sale of the present site. Surely the City Council will not obstinately stand in the way of the removal of a scandal of such magnitude.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council, held on the 4th inst., a letter was received from the Committee of the Medical Students' Society, bringing under the notice of the Council some facts which seemed to the Society to indicate a highly unsatisfactory state of affairs in the Medical School. At the last ordinary examination eighteen candidates entered for senior anatomy, of whom seven only passed. Seventeen entered for regional and applied anatomy, of whom four passed. The students were perfectly satisfied with the fairness of the papers and of the examiners, and they attributed the circumstance that 64 per cent. of the candidates failed to pass to the fact that the supply of bodies for dissection was less than one-half of what was required, necessitating two students to be at work on the same part of one body at the same time; that during the year the work of the demonstrator of anatomy had been largely done by substitutes, and that, at present, fourth-year students, while nominally free to attend either the medical or surgical practice of a hospital, were practically compelled to choose the latter, and, therefore, while studying pathology as one of the subjects of examination in that year, they were unable to attend either post-mortem examinations or pathological demonstrations. Their knowledge, therefore, was almost entirely theoretical, and the practical work remained to be done in their fifth year. The Committee could not but think that the training of the students, and the reputation and success of the Medical School, were seriously imperilled if matters were allowed to remain in their present state; and it was therefore respectfully requested that steps should be taken to improve the work in these respects as early as possible in the current year.

Dr. MORRISON remarked that the matters referred to in the letter were of the greatest importance. Many medical students were already leaving for England and elsewhere, in consequence of the inadequate teaching given in this University.

On the motion of Dr. Robertson, it was decided to refer the letter to the Medical Faculty for report and suggestions.

Dr. S. D. Bird has been elected a member of the Council.

The following is the list of successful candidates in Medicine at the recent examinations :—

FIRST YEAR.

William T. Chenhall, William Davis, Ernest Arthur Dombrain, Robert John Fullerton, Norman Edward Gibbs, Horace Grattan Kelly, Arthur Norman McArthur, James Charles Morton, John Ruddock Mouritz, William Robert Thrower, Thomas Alexander Wilson.

SECOND YEAR.

Edward Champion, Charles Arthur Courtney, Alfred Cowan, Julian Gilbert Desailly, Louis Joseph Frederick Dombreu, George Constable Hayes, Frank Ernest Littlewood, Annie Genevieve O'Hara, James Henry Sleeman, Grace Clara Stone, Ernest Robinson Sutton.

THIRD YEAR.

Leslie Davies, William Henry Harbison, James Charles Kennedy, William Lowe, Ramsay Mailer, William Henry Rigby.

FOURTH YEAR.

Alexander Bruce Bennie, Richard Horace Gibbs, William Waugh Hope, Arthur John Nyulasy.

FIFTH YEAR.

Edward Henry Embley, Robert Wilson Hughston, Francis Henry Langlands, Richardson Wakefield Lewers, George Frederick McWilliams.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee held on the 19th ult., the Annual Report of the Medical Superintendent caused some commotion. It showed that during the past year 4216 cases had been treated in the institution, as against 3590 the previous year, and this in the face of the fact that in order to give more air-space the number of beds had been reduced. Of these 337 were typhoid cases, and 69 were fatal; 259 were phthisis cases, and 136 were fatal. This extraordinary fatality was explained by the fact that, owing to the limited space, only the most

urgent cases could be admitted to the institution, whilst numerous cases, which deserved to be admitted, had to be refused in consequence of there being no beds available. A discussion ensued as to the necessity and advisability of erecting a new hospital, and it was finally decided that the question of providing more accommodation should be referred to the building committee, and that a deputation should wait upon the Government at an early date, to urge upon it the purchase of the Queen's Coffee Palace in the event of such premises being for sale. At the same meeting letters were received from Dr. Moloney, Dr. Springthorpe, and Mr. C. Ryan, asking for a fortnight's leave of absence, which was granted on the understanding that suitable arrangements should be made for carrying on their work.

At the meeting of the Committee held on the 5th inst., Dr. H. Astles was elected physician to the out-patients.

ALFRED HOSPITAL.

At a meeting of the hon. medical staff, on the 18th ult., a letter was received from Dr. Molloy (resident physician), calling attention to the action of the Prahran Council, in declining to grant orders for admission to the fever camp without a certificate from the health officer (Dr. Fetherston), that the case was undoubtedly one of typhoid. It was therefore resolved that the attention of the managers be called to the matter, with the following expression of opinion, viz.:—"It is most important that there should be no delay in placing typhoid patients under treatment, as even a few days lengthen the duration of a case, and increase the death-rate. In several cases coming to the municipal tents delay has occurred. It would be well if all such cases, as soon as they are declared to be typhoid by the medical man in attendance, and reported to the local authorities, could be at once received into the hospital." The Secretary was instructed to forward a copy of the above resolution to the Prahran City Council.

At the meeting of the Committee held on the 8th inst., a letter was received from Dr. W. H. Embling, chairman of the hon. medical staff, which had been addressed to him by the third year lady students attending the hospital, stating that Professor Allen recently informed the students that, according to his usual custom, he would give them demonstrations once a week at the Melbourne

Hospital in topographical anatomy, the relative positions, size, and so forth of the organs of the body. He told them that they could attend his demonstrations there, but asked whether they could not obtain the required instruction at the Alfred Hospital, as it would be more convenient for them to have it at their own hospital. The lady students therefore asked whether any such arrangements could be made for them to receive such instruction at the Alfred Hospital. Dr. Embling reported that he thought it would be possible to obtain a demonstrator of anatomy from among the members of the honorary staff, if the managers desired it. The letter was referred to the clinical committee for consideration.

WOMEN'S HOSPITAL.

At the meeting of the Committee held on the 15th ult., Mrs. Miller stated that it had been brought under the notice of the Committee that the cases of patients, who were admitted to the institution suffering from the effects of illegal operations and malpractice, were alarmingly numerous. She doubted whether such cases should be admitted at all, but as it was impossible to turn away any patients in a critical condition, she thought that the police ought to be communicated with, in order to check a practice which was becoming dangerously prevalent. She moved, that in all future cases where patients were admitted suffering from the effects of malpractice, the police should be informed of the occurrence. The motion was carried.

At the meeting of the Committee held on the 8th inst., three weeks' leave of absence was granted to Dr. Anderson, resident physician, on condition of his procuring a suitable *locum tenens*.

Vital Statistics.

The Government Statist's monthly report on the vital statistics of Melbourne and suburbs for January 1889, shows that the births of 1386 children, viz., 711 boys and 675 girls, were registered. The deaths registered numbered 1211, viz., 655 males and 556 females. To every 1000 of the population of the district, the proportion of births registered was 3·30, and of deaths 2·88.

One hundred and sixty deaths, or 13 per cent. of the whole, took place in public institutions. The number of children under 1 year who died was 532, the total number under 5 years being 694.

As compared with the previous month, under the head of specific, febrile, or zymotic diseases, deaths from simple cholera, diarrhœa, and dysentery rose from 140 to 164, deaths from typhoid or enteric fever from 31 to 71, and deaths from diphtheria from 9 to 15. Under the head of constitutional diseases, deaths from cancer increased from 21 to 28, whilst those from phthisis fell from 92 to 72. Deaths from those complaints, chiefly of infants and young children, placed under the head of atrophy, debility, and inanition, rose from 141 in December to 182 in January.

Correspondence.

To the Editor of the Australian Medical Journal.

SIR,—I should be glad to hear from members of the profession who have prescribed the liq. carnis, prepared by the Liq. Carnis Co., Melbourne, how they administer it to their patients. The theory of its action, and the report on its chemical examination by the Government analyst, are both such as to induce every one to give it a fair trial. I have been prescribing it in the class of cases in which it is recommended ever since it has been obtainable, and in only one instance (a case of enteric fever) would the patients tolerate more than the first two or three doses. They either quickly rejected it from the stomach, or refused point blank to continue it. Two medical friends who prescribe it a good deal, tell me that their patients take it quite well. On the other hand, all the chemists from whom I have made enquiry, say that they are told that those, who are ordered it, object most strongly to it. I have given it with everything that I have been told would disguise it or make it more palatable, but without effect. Will those gentlemen who have had any experience in the use of this preparation, kindly answer my query through the medium of your journal.

Yours, &c.,

ROBT. DURHAM PINNOCK, M.D.

To the Editor of the Australian Medical Journal.

SIR,—I am rather anxious to know what book or books are likely to contain full information as to the influence of underground mining on respiration, and also as to the number, names, and proportions of the different gases which exist in the air underground.

If you can give me the name of such a book or books, you will greatly oblige.

Your obedient servant,

Mt. Egerton, Feb. 13th, 1889.

N. SISCA.

[Perhaps some of our readers can supply the desired information.]

Local Subjects.

HEALTH OFFICERS.—The following appointments have been confirmed :—
Town of Geelong—James Grafton Carstairs, M.D., *vice* the late Eustace J. Walshe, M.R.C.S., resigned ; Shire of Lowan, West Riding—Thomas Francis Ryan, M.B., *vice* Rivis Mead, M.B., resigned ; Shire of Towong—Johnstone Simon Thwaites, M.B., *vice* John H. Mackenzie, F.R.C.S., relieved ; Borough of Queenscliff—Ronald MacDougall, L.K.Q.C.P., *vice* Thomas D. Moore, L.R.C.S., deceased ; Shire of Kowree, Eastern Riding—Frederick Dell Hayman, M.R.C.S., Central and Western Ridings—Samuel Handy Halahan, M.B., *vice* Dr. Hayman for the whole shire ; United Shire of Beechworth—Alfred Henry Parker, L.R.C.P., *vice* Henry T. Fox, M.R.C.S., resigned.

PUBLIC VACCINATORS.—The following appointments have been made :—
Kyneton—Robert Byron Duncan, F.R.C.S. Edin., temporarily, during the absence on leave of William Langford, M.R.C.S. Eng. ; Kaniva—Thomas Francis Ryan, M.B., *vice* R. Mead, M.B., whose resignation has been accepted ; Macarthur—Joseph Ross, M.D. ; Wodonga—John Hugh Mackenzie, F.R.C.S., *vice* W. C. Woods, M.D., who is hereby removed from office, having left the district.

ACTING MEDICAL SUPERINTENDENT, BEECHWORTH LUNATIC ASYLUM.—
E. E. Rosenblum, M.B., Senior Medical Officer, Yarra Bend Lunatic Asylum, has been appointed Acting Medical Superintendent of the Beechworth Lunatic Asylum, during the absence on sick leave of the Medical Superintendent, F. E. Deshon, M.R.C.S. Eng.

THE CENTRAL BOARD OF HEALTH.—At the meeting of the board on the 22nd ult., the President reported that a letter had been addressed to the Chief Secretary, recommending the appointment of a medical inspector and adviser to the board. The letter stated that such an officer would be a great assistance to the board in cases of typhoid fever and similar diseases. Such officers were employed in England, and their reports were regarded as valuable throughout the world. Hitherto the board had been dependent

upon the assistance of Dr. Shields, Government medical officer, but owing to the increase of his duties in other departments, he was unable to devote so much of his time to the requirements of the board. Applications should be invited both in London and Victoria from qualified medical men, with some experience of sanitary matters. A salary of £1000 should be affixed, though less might be accepted at first. Approval was expressed of the views put forward in the letter. A letter was also received from the Chief Commissioner of Police, drawing attention to the case of a man named James Keating, who was found in a destitute condition in South Melbourne, suffering from typhoid fever. The police secured his admission to the Melbourne Hospital, after he had been refused for want of room at the Alfred and Homœopathic Hospitals. He drew the special attention of the board to the difficulty which the police had in finding accommodation for such cases. After some discussion, the president said that two medical gentlemen from Williamstown had waited upon him with reference to some cases of typhoid fever, with which the local board was puzzled how to deal, and had asked if the use of the sanatorium would be granted. He had replied that it would, and had telegraphed to the mayor of Williamstown to that effect. It was resolved that a circular be sent to all local boards which contribute to the sanatorium, informing them that they can have the use of it for patients, but must provide medical attendance, medicine and food.

At the meeting of the Board on the 8th inst., the president presented the tabulated returns for typhoid fever and diphtheria. Upon the last occasion he said that Horsham was in the worst position, but now Moorabbin showed the largest return of cases to population. The order was:—Moorabbin 9·57 to every 1000 of the population, Horsham 7·6, Coburg 6·0, South Melbourne 5·5, Brunswick 5·3, Oakleigh 4·47, Northcote 4·0. It was noticeable that the suburbs where nightsoil was most largely deposited, or through which it was carted, were the worst. Typhoid fever this year did not appear to be of so virulent a type as many medical men had predicted. The death-rate up to date this season was under 10 per cent. The average death-rate from this disease for the world was from 15 to 25 per cent. The number of deaths reported this year from the 1st of January to the 6th of March was 161, and last year for the same period it was 135. But though there were thus 26 more deaths to date, there were 1073 more cases reported. This year the number of cases reported was 1725, as against 652 last year.

In reply to a letter forwarded to the Prahran Local Board of Health by Dr. Leger Erson, of Prahran, complaining that two typhoid patients had been refused admission to the Alfred Hospital, owing to a delay in obtaining a certificate from the local health officer (Dr. Fetherston) that the patients suffered from typhoid fever, and were in indigent circumstances, Dr. Fetherston forwarded a lengthy communication, which was read at the meeting of the Prahran Council on Monday evening. In it Dr. Fetherston fully explained the nature of the circumstances which led to the unavoidable detention before admission to the hospital. If the cases had been urgent when application was first made at the hospital, the patients would at once have been taken in by the resident medical officers. The letter further contained refutations of certain remarks in Dr. Erson's letter, reflecting upon the standing of Dr. Fetherston as health officer. In pursuance of the subject of the admission of Prahran typhoid patients without the certificate

of the local health officer, a petition signed by 39 medical practitioners, residents of Prahran and St. Kilda, was received, as follows:—

"We, the undersigned medical practitioners, strongly protest against your recent decision to grant no person in indigent circumstances, suffering from typhoid fever, your permit to the Alfred Hospital, except on the certificate of your medical officer of health. Such certificate and consequent inspection by your medical officer of health are quite unnecessary, as the certificate of the medical attendant, stating the case to be typhoid fever, should be alone sufficient, for even should he prove to be in error, which is not probable, still the authorities of the Alfred Hospital are unlikely to charge the council for cases which have turned out not to be typhoid fever. We consider, Sir and gentlemen, that, in order for you to give the matter your serious consideration, it is only necessary to point out that you, by your recent action, are unconsciously offering a gratuitous insult, not only to the medical profession, by questioning the authenticity of the certificates rendered by them, but also to the authorities of the Alfred Hospital, implying, as it does, that they are capable of defrauding you. Again, you are placing your health officer in an invidious position, which must be to him objectionable. We, the undersigned, who are affected by your decision, protest that any one of us is perfectly capable of diagnosing typhoid fever.

"We are, &c.,

("Signed by 39 medical practitioners.")

It was pointed out by the town clerk that the petition had been printed a week ago, before being sent to the council. This was characterised by the mayor as a gross insult to the council. In view of the fact that a great number of the petitioners resided in St. Kilda, and that the council could only use the corporation funds for provision for its own sick, and in order to prevent a run upon the hospital by persons well able to pay, it was resolved to abide by the arrangements already made with their medical officer, in whom they had every confidence.

BIRTHS.

SCHIEL.—On the 9th inst., at her residence, Cheltenham, the wife of Dr. Schiel, of a son.

WILLIAMS.—On the 3rd inst., at Clarendon Terrace, East Melbourne, the wife of Dr. E. Johnson Williams, of a son.

DEATHS.

ECCLES.—On the 13th inst., at High-street, Malvern, Violet Geraldine, the fourth daughter of James Howard Eccles, L.R.C.S.I., aged 8 years.

GILBERT.—On the 5th inst., at Tarnagulla, Victoria, Robert Gilbert, M.B. and C.M. Glasgow University, of Phthisis, aged 34 years.

M'CARTHY.—On the 14th ult., at her residence, "Althea," Paisley Street, Footscray, Constance Beatrice, the beloved wife of Chas. L. McCarthy, M.B. Ch.B., and second daughter of the late James H. Lane.

WESTROPP-HUTCHINSON.—On the 28th ult., at Alma Road, St. Kilda, Berkley Westropp-Hutchinson, M.R.C.S. Eng., aged 74 years.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal

APRIL 15, 1889.

Original Articles.

CONTRACTION AFTER BURNS.

By J. H. WEBB, M.R.C.S.

Surgeon to Out-patients, Melbourne Hospital.

Attending the Out-patient department of any large Hospital, assistant surgeons occasionally meet with curious cases, whose twists and distortions are such as to give rise to doubts whether, in dealing with these injuries at the time of the accident, the best treatment has been adopted. We watch the progress, witness the results of these cases, long after they have left the wards and the charge of the in-patient staff, though probably we have not been actively engaged in the proceedings undertaken on their admission, yet thereafter their secondary treatment has been so essentially our own, that in some respects we are in reality better able to estimate the merits of what has been done for them, than we would have been if, as in-patient surgeons, they had merely occupied our beds for a time, and subsequently passed out of sight.

In this list may be included the effects of burns about the flexures of the elbow and knee, and those abscesses which create such havoc in the hands and fingers. It is easy enough to extol conservative surgery, and exult when a limb or finger has been saved. But when we see how useless a limb is sometimes left, and what a nuisance a stiffened finger may become, we are prone to ask ourselves if the results are worth the trouble they have cost. Is the patient better off with a knee contracted to nearly a right angle, or an arm and hand shrivelled and cicatrised, than he would be with a stump? For the contractions following large destructions of skin we can do absolutely nothing beyond healing the wound. Billroth impresses this when he relates, in his article on tenotomy, his experience in the instance of a child whose arm had been badly burnt. After treating the case, with the limb stretched out on a splint till the whole surface had healed, he was disgusted to find that in spite of his labours acute contraction

occurred as soon as the extension was removed. And this is the common experience. After employing every scheme, from Reverdin's grafting to free tendon section, the limb bends up and distorts just as it would if it had been left alone from the start. Flexion of the arm to a right angle may, to a rich man, be only a matter of very great inconvenience, but to the labourer, if the fingers also happen to be acutely bent, as they generally are where the anterior portion of the elbow is involved, this injury means loss of his means of livelihood.

Speaking now wholly of limbs in which cicatricial contraction has rendered the hand or the leg practically useless, are we wise in exerting ourselves in the way we do to preserve those members? Do we not sometimes err on the side of conservatism? We should recollect that convalescence from these injuries must necessarily be very protracted, extending over a year or even two. During this time habits are likely to be incurred which, regarded from their moral aspect, are injurious in the extreme to the working-man, especially if he lives a city life. Of course we are not to be influenced to any considerable extent by this factor, nevertheless it is one we should hold in remembrance in the same manner as we should the effects of drink in the administration of stimulants.

The healing of a large surface, denuded of its integument, is accompanied by a more or less offensive discharge, which, whilst it lasts, is an abomination to the patient himself, and disgusting to those immediately surrounding him. The cicatrix, even if completely healed, is likely to break down again on the slightest provocation, and the lowly vitalised tissue, of which it is composed, may become the habitat of epithelial cancer.

As regards the labour question—for these remarks apply to hospital out-patients—what can a man with an acutely flexed arm do? or, not to go so far, with an arm bent to a right angle, and a hand wholly, or even partly, involved? He cannot do pick and shovel work, or lift weights. Perhaps he can drive, but he cannot control a restive horse. As a servant, as a valet he would be useless. So that a man thus maimed is no better off than, if as well, as one who has had his limb removed. With a wooden leg, or an artificial arm, or a hook, a man can manage a great deal. The best valet I ever knew had only one arm. There are many employments these mutilated people can follow. As soon as the stump is well the man's health recovers and he can at once go to work, and generally he falls into some occupation that enables him to half

forget his loss. On the other hand, look at the miserable wretches we occasionally see in the out-patient department and dispensaries, coming to have their old burns dressed. They attend Mondays and Thursdays from one year's end to the other, and in the end are not one whit better in December than they were in the preceding January. These men, and they seem worse when their lower limbs are affected, degenerate into regular hospital loafers, idle and dirty—a moral degeneration, which, at one time, their better nature would have scorned, and which a more decisive treatment of their injury would have prevented. I do not wish to infer for one moment that character has anything to do with the keeping or losing of a limb, but I do certainly think that many a man would go to his grave wiser and happier, if the energy of his surgeon had been expended in another direction.

During my connection with the Melbourne Hospital, four instances, which will serve to illustrate these remarks, have come under my observation.

With the first of these I had some slight acquaintance through a Friendly Society, of which he had been an officer and I the medical adviser, prior to the time of accident. This man was then a foreman in an oil warehouse, owner of his own house, and as steady and well-to-do a citizen as one could wish to meet with. Through a match igniting his trousers, the whole of the skin covering the popliteal space, half the calf of the leg, and the posterior portion of the lower fourth of the thigh, was so charred that it sloughed and came away. As far as I remember, the skin covering the patella, and perhaps the sides, was intact. Admitted into the Hospital, he lay for some months in Ward 18, and on the surgeon in charge of half that ward leaving for a holiday trip to England I took care of his beds, and thus the patient came under my supervision. He was confined to his bed, to the best of my belief, for another six months, splintered and bound up in every conceivable manner that would maintain extension. When he left the ward the leg was fairly straight, and the ulceration nearly well. Sometime after this he turned up again among the out-patients; the ulceration was entirely healed, but the leg was flexed to nearly a right angle, and the patient walked on a peg-leg. Hoping against hope, by tendon division, to be able to improve the limb, he was admitted into the Hospital again; but tendon section, when, in place of integument, nothing but fibrous membrane remains, is a

very different thing from tenotomy under a sound skin. Anyhow my efforts were futile, and he left the wards worse, if anything, than when he entered them. I advised, though not warmly, amputation, as his leg was such an impediment to his progression. This suggestion he unhesitatingly scouted. No doubt if the proposal had been made to him shortly after the burn was inflicted, he would then have willingly listened to the counsel tendered, but to sacrifice his limb after suffering so long, and when the parts were apparently healthily cicatrised, seemed to him a monstrous proposition, and he indignantly rejected as blood-thirsty the only treatment which really could have been of avail. Now watch the sad progress of this man's career. Of course with such a bent-up leg, he could not follow his occupation as a storeman. His illness, now approaching three years' duration, had exhausted his lodge assistance, nearly the whole of what means he had, and the donations of his friends. Take away the responsibilities attached to the duties of a storeman, and he was simply a day labourer—that is to say not a tradesman—consequently there was no skilled occupation open to him. After having tried several things, he at length became time-keeper at the cab rank I think in Bourke-street, earning only a very small pittance, and I dare say by the above description the individual will be easily recognised by some who may read these pages and are familiar with Melbourne street faces. One day a boy, larking, ran up against the leg that stuck out from the artificial one and upset the poor fellow. In the fall he sustained an extra-capsular fracture of the thigh on the sound side, and again lay in the hospital another three months. His affairs became involved—he had to part with his house, and when I last saw my patient, some two or three years ago, he had become a hopeless, helpless, poverty-stricken cripple. And all this accrued in consequence of a surgeon insisting on saving a limb, which he must at the time have strongly suspected could never again be of service, and might become an element of danger—"A sacrifice on the altar of conservative surgery."

Another case is that of a woman, who, until quite recently, used to attend amongst my out-patients at the Melbourne Hospital. This person, some years ago, was severely burnt over the front of her arm at the bend of the elbow, the char extending down to within three inches of the wrist. Though the hand itself was not involved in the burn, yet the fingers, from contraction of the flexors were so bent down to the palm, as to be practically

useless. For some reason or other, her general ill health, her mental despondency, or perhaps her poverty, a sound cicatrix never formed. The parts were covered for a short time till exposure, the friction of her dress, or other slight irritation, caused some little chafing, and away went the false skin, leaving an angry patch which took months to heal up again. And this thing had been going on for years. Whenever I look at this arm, I think what an amount of pain and trouble this woman would have been saved, if the surgeon who first attended the injury had removed the limb at once. And this gentleman has repeatedly told me that at the time he was very doubtful if the limb would ever again prove of service. He did not like to amputate at the time, because only the skin was destroyed. Now he candidly admits that, looking back at what his patient has gone through and the present helplessness of the limb, a more heroic treatment would unquestionably have been preferable.

In the third case, I was the offending surgeon. An engineer on some works at Emerald Hill managed to get the back of his hand caught in some machinery, and it caught in such a way that the whole of the skin covering the extensor tendons of the hand, from the wrist to the head of the metacarpal bones, was torn off; no other structures were injured, and the thumb was unhurt. I watched this case with a great deal of interest, as at the time I had a dim suspicion that if the little and ring fingers were left, the usefulness of the hand would be impaired. By rest, splints, &c., we managed to get the dorsum of the hand bridged over. But what a hand he has! It is almost useless, and save for the thumb, it would be completely so. Now, if I had sacrificed the digits alluded to, and brought the skin covering their metacarpal bones on the palmar surface over the back and under its free border to the integument left on the radial side of the hand, I should have given my patient a much better member. Even the loss of the little finger and first metacarpal bone might have sufficed. Now, when he accosts me in the street, I am surprised to see what small service his four fingers are to him; he scarcely has any grasp at all. I need not say that this accident quite incapacitates him following his trade as an engineer.

One more instance—a case of epithelioma occurring in an extensive cicatrix after a burn on the forearm, and for which amputation was twice performed. This patient was for a long time a familiar figure about the hospital. That epithelial cancer

is likely to occur in any lowly vitalised structure such as a cicatrix, is of course well-known; but the peculiarity of this case was that the hand was so injured by the burn, that one wonders it was not removed at the time of the accident. The surgeon who attended her then told me that at first he did intend to perform a primary amputation, but that he hesitated to do so for a burn where apparently the skin only was injured.

The conclusions to be gathered from these cases—I believe they are the only ones of the kind that have come under my observation, a drop in the bucket compared with the experience to be obtained in large mining and manufacturing cities—the conclusions seem to be, that in considering the question of amputation after burns, and injuries involving large tracts of skin about the flexures of the arm and knee, attention should be drawn to the future serviceability of the limb. We can carry our conservatism too far. I have never performed, or even seen, an amputation for burn; but then Melbourne is a city in which very few casualties occur from fire. These cases that I have related illustrate that occasions do occur where immediate amputation would have been the best treatment. Even if the limb is saved, a useless limb is a dreadful encumbrance, much worse than none at all. With a stump one can do many things, but with an arm withered and contracted, or a knee acutely flexed, nothing at all.

NOTES ON ANÆSTHETICS.

By C. L. LEMPRIERE, M.B., C.M. Edin.

Too much care cannot be taken in the selection and administration of anæsthetics. It will not now suffice to place a stethoscope momentarily over the cardiac area, produce a small piece of lint, and indiscriminately proceed "to give a whiff of chloroform" to every case which may be entrusted to our care.

There are many points, both theoretical and practical, which the anæsthetist must consider before he begins to administer an anæsthetic. The nature and length of the operation, the idiosyncrasy and general condition of the patient must be investigated, the dangerous symptoms which are most likely to arise must be carefully thought of, and lastly, the physiological action of the anæsthetic must be thoroughly understood.

By auscultation, a certain amount of information may be gathered as to the condition of the heart and lungs, but there are

other very important things, such as atheroma of the coronary arteries, idiosyncrasy, and the way in which the shock of the chloroform or the operation may affect the patient, which the cleverest of our physicians are unable to foretell. The above are always a source of anxiety to the anæsthetist, but the only way to obviate failure is to be always on the *qui vive* for the first sign of danger. The recumbent, unrestrained, and easy posture must always be insisted upon. The best time for taking anæsthetics is in the morning.

Why is chloroform more frequently used in this colony than ether? No doubt on account of its portability, its easy application, its cheapness, and because less is necessary; cumbersome apparatus, likely to frighten the patient, is not required; anæsthesia is more quickly produced; and lastly, ether does not suit the extremes of life. Granting all this, however, should we not use ether more than we do, when we know it is safer in all ordinary cases? It is less dangerous than chloroform because its undiluted vapour is practically safe, whereas chloroform, unless kept below four per cent. of the air breathed, seriously imperils life. Ether is also a direct stimulant to the heart and circulation generally, whereas chloroform is a depressant to both.

For the production of anæsthesia in children, chloroform is no doubt the best, because heart lesions are rare in childhood, and when present are well pronounced, and every other organ is healthy or supposed to be, therefore the child's chance of standing the chloroform is greater; this, in my opinion, is the only reason why it is supposed to be safer in children than in adults. On the other hand, we know the danger of giving ether to a child, its irritating effect on the delicate bronchial mucous membrane, while the cold produced may cause an acute attack of bronchitis or congestion of the lungs; still, we see children take mixtures—either the A. C. E., or chloroform and ether, in different proportions, very well.

The well known A. C. E. mixture, which is used in preference to pure ether in the Hospitals of this colony, has its advantages; but the immunity from danger, which the A. C. E. mixture gives, is not due to the ether or alcohol, but to the dilution of the chloroform, for it is generally given by the open method, and the evaporation of the ether being so rapid its effect is soon lost, and the stimulating effect of the alcohol is so slight that I think it is very little use except to dilute the chloroform. It is well known

that when the patient is once properly narcotised, a much less quantity of the drug is required to keep him in that state; therefore, if after anæsthesia is once properly produced, the chloroform used to continue the anæsthesia were diluted by once or twice its quantity of ether, it would be taken more steadily and more even narcosis would be the result, with greater safety to the patient; but on no account must the anæsthetist be less careful or watchful because the chloroform is diluted.

The amount of an anæsthetic required to produce insensibility differs in every case. By some it is supposed to be in proportion to the amount of blood in the person to whom it is administered, so that young children and anæmic persons require less than the full grown and plethoric. Some people are much more susceptible to the action of chloroform than others. For example, alcoholic subjects, as a rule, take chloroform badly, and are always a source of anxiety to the anæsthetist. Sometimes, however, they take it very well up to a certain point, then suddenly the pupils dilate, pallor becomes marked, the pulse is feeble and intermits, and the breathing becomes very shallow and slow. This state of collapse may happen to the most attentive of us, therefore, I think it safer to use diluted chloroform as soon as the second or excitement stage is over—for example, two parts of ether to one part of chloroform—as we are aware, that when the patient is once properly under the influence of the narcotic, it does not require anything like the quantity to keep him in that state that it did to produce the anæsthesia. Again, this class of patient is less sensible to pain, and insensibility is often prolonged; therefore, not so much of the anæsthetic is required after he is once under its influence. We also find that these patients are sometimes very difficult to rouse, and when they do come round, are quite intoxicated, as if they had been drinking to excess.

With respect to the treatment of chloroform poisoning (collapse), I should like to refer to Dr. Benjamin Howard's paper on "How to Raise the Epiglottis in Apnœa" (*British Medical Journal*, November 17, 1888). To raise the epiglottis and get the respiratory passages clear is our first thought, whether the collapse be from syncope or asphyxia. The usual way to do this is, by grasping the tongue with a pair of forceps and pulling it forwards, and extending the chin. These two factors are no doubt very important, but Dr. Howard has proved that pulling the tongue forwards *does not raise* the epiglottis, but inclines more to

close it. The only way, according to him, is to produce extreme extension of the head on the vertebral column. By this method there is no need for tongue forceps, unless the tongue has fallen back against the posterior wall of the pharynx, but if the extension is properly carried out, the tongue will naturally fall on to the arch of the mouth, and so leave respiration free to be carried on in its proper course, through the nose. The safest way, in my opinion, is first to pull the tongue well forwards, then use the extreme extension. After clearing the air passages, at once start artificial respiration, at the same time raise the legs in order that the blood may gravitate to the trunk, and increase the blood pressure there. I have seen a sponge, dipped in very hot water, and placed over the præcordia, prove a very good stimulant to the heart.

Nitrite of amyl is regarded now-a-days as a nearly certain antidote for chloroform poisoning. According to my experience it is of very little avail when the sensory nervous system is paralysed. It is not a direct stimulant to the heart; it acts secondarily on it, through the dilatation of the vessels of the head and neck, and so reduces the arterial pressure, thus there is less blood supply to the heart muscle itself. The nitrite of amyl method is exactly contrary to the inversion of the patient theory, which increases the arterial pressure, by filling the vessels in and near the heart, head, and neck. This method, in my experience, nearly always produces a good and rapid result. Some irritants, such as ammonia, snuff, &c., have been used as stimulants, but are of no avail when sensation is lost. Fresh air is one of the best stimulants we have; therefore, let the patient have as much as possible, by opening all doors, windows, &c.

Among other measures, electrical stimulation of the heart, and acupuncture of that viscus, are recommended. As to the first of these its action is doubtful, since while it may produce excitation, it may cause inhibition of the heart muscle; and further, when wanted, a battery is seldom at hand. As to acupuncture, I cannot express an opinion, as I have never seen the experiment tried.

The treatment I practise, when dangerous symptoms ensue, may be summed up thus :—The recumbent posture, plenty of fresh air, draw the tongue forwards, fully extend the head, raise the legs, persevere with artificial respiration, and apply heat over the præcordia.

NOTES ON A CASE OF POISONING BY ARSENIC
ABSORBED BY THE SKIN.

By H. A. REID, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A. Lond.

G. C., aged 18 years, was seized, on Saturday, March 9th, with pains in the abdomen, and nausea. The symptoms continued through Sunday and Monday, with slight amelioration. On Tuesday night they became very severe, and vomiting was most troublesome. As the household pharmacopœia had been exhausted, I was called to see her on Wednesday morning. Her condition was then as follows:—Face pale, expression anxious, frontal headache, heat and constriction of fauces, slight vertigo, muscular pains down the limbs, shivering, small pulse, severe retching, cold extremities, frequent diarrhoea, and some cramps in the abdomen. In fact, there were all the symptoms of cholera. I was also shown a very peculiar vomit of a blueish colour.

On making enquiries, I found she was "learning the dress-making," and I noticed that her hands were stained of a similar colour to the vomit. I was told that her hands had been so stained by working at a "black linen," which was used principally for lining ladies' dresses. I at once suspected some irritant poison and could elicit no satisfactory reason, unless from the absorption of the colouring matter of this material. I prescribed the usual remedies, and in a few hours saw her again, when the urgent symptoms were considerably less, but still in existence.

The next morning the vomiting and pains had greatly decreased, and the period of reaction had evidently set in, with temp. 101.2° , pulse 124, full and bounding, and the pallor of the face had given place to a hectic condition. The symptoms gradually waned under the treatment prescribed. The temperature and pulse lowered to the normal, but there was suppression of urine for thirty-eight hours.

From this time onwards she gradually improved, although a weak condition of the circulatory and digestive functions remained.

On examining a specimen of the first vomit, I found that, on standing, it separated into two portions—the upper being clear and of the colour of a weak solution of Cu So_4 —the lower, opalescent and of the colour of Fe So_4 . I had it tested, with the result that arsenite of copper was found in solution. I also obtained a piece of the "linen" with which she had been working, and had that tested, with the result that a decoction of it also showed it to

contain arsenite of copper. Therefore, I think I am justified in believing this to be a case of arsenical poisoning, and the question arises—can such poisonous dyes be absorbed through the skin of the hands by those working with material containing them; or, are they absorbed by the respiratory organs from the particles of dust given off from the material? Any criticism on this question I shall most respectfully digest.

I may make the remark, that I made full enquiries as to her working or living in a room with green paper, and also, of her using either dyes or cosmetics, and I found that neither was the case.

My apology for introducing such a commonplace case must be the natural argument to be deduced from it, viz., if a person working on this material suffers, how much more likely are the wearers of it to be affected.

A CASE OF POISONING BY OXALIC ACID.

By CHARLES BAGE, M.A., M.D.

M. B., female, aged about 50, cleaner of straw hats, intemperate, was last seen alive at 8.45 a.m. on March 5. She was then apparently in good health. On the same day, at about 6 p.m., she was found dead. She was lying on her side on the floor near her bed, dressed. Her body was cold and stiff. An empty cup, encrusted inside with crystals of oxalic acid, lay on the floor near her right hand. Oxalic acid, which is used in cleaning straw hats, was found in other parts of the house. Near her was a basin containing about two pints of yellow pultaceous vomited matter.

A post-mortem examination was made at 2 p.m. on March 6. Body stout, and fairly muscular; cadaveric lividity well marked; no rigor mortis. The lateral ventricles of the brain each contained about half an ounce of clear fluid. The heart was soft, and contained dark fluid blood in all its cavities. The left ventricle was thin-walled and dilated. Both lungs were highly congested and softened. The liver was large and fatty; it was not congested. The spleen was small, dark, and soft. Both kidneys were small and granular, with adherent capsules. The bladder contained a few ounces of clear urine. The uterus and ovaries were normal. The mucous membrane of the tongue, interior of the mouth, pharynx, and œsophagus was pale and soft, but not

swollen or abraded. The stomach contained a small quantity of undigested food, and its mucous membrane, as well as that of the lower part of the œsophagus, was thickly coated with greenish-black tenacious mucus. The membrane itself was pale and dark in patches, but not abraded, and the blood-vessels underneath it were distended with black blood. The intestines were normal.

The vomited matter, and the contents of the stomach, were not further examined.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, APRIL 3RD, 1889.

(Hall of the Society, 8 p.m.)

Present:—Dr. Balls-Headley (in the chair), Drs. Bage, Barrett, Barker, Davenport, Joyce, Jamieson, Lynch, Howard, Maudsley, Le Fevre, Moore, Neild, Loosli, F. J. Owen, Syme, and Workman.

The minutes of the preceding meeting were read and confirmed.

Two gentlemen were nominated as members of the Society.

The following notice of motion was given, the President being the mover, and Dr. Neild the seconder:—"That Rule 6 be amended by the substitution of the words 'two guineas' for one guinea after the words 'annual subscription of,' and by the addition of the words 'which shall include payment for the *Australian Medical Journal*' after the word 'guineas.'" The portion of the rule, if amended, will then read, "ordinary members shall pay . . . an annual subscription of two guineas, which shall include payment for the *Australian Medical Journal*."

The following paper was then read:—

NOTES OF A CASE OF URINARY CALCULUS.

By CHARLES BAGE, M.A., M.D.

A gentleman, æt. 70, previously healthy, though subject for some years to slight rheumatic pains, complained, in July 1887, of profuse perspiration, scanty urine, and frequent micturition. He was then rather feeble; pulse 60, temperature normal. No pain or tenderness in the loins or elsewhere. Urine acid, not containing albumen or sugar; one sample was clear, and of a sp. gr. of 1020; another sample, passed on the same day, was turbid with amorphous urates, and had a sp. gr. of 1026.

A month later he had a mild attack of gout.

In August 1888, the perspirations returned, and he found that he was passing numbers of little calculi. Calculi were passed daily for about three weeks, but the only pain experienced was at the meatus urinarius on one occasion when a larger one than usual was voided. Probably 150 or 200 were passed; nineteen were collected for me in two days. Sixteen of them, when quite dry, weighed collectively only two grains, though they looked much heavier; the other three were used for analysis. The calculi consist of uric acid, and are reddish brown, a few being pale on the surface. They are round or ovoid, without facets or projections, and from $\frac{1}{16}$ th to $\frac{3}{16}$ th of an inch in diameter. One that was broken in two, for examination, is yellowish-red in the centre.

The treatment consisted in frequent doses of citrate of potassium dissolved in water and well diluted. From the first dose, the perspirations and frequent micturition ceased; a few more concretions were passed, and the patient regained his ordinary health. The treatment was continued for two or three months, and lithia water was taken during the summer.

This case illustrates the well-known association between gout and gravel. The absence of pain was unusual, and, I think, was accounted for by the extremely temperate habits of the patient, and the care with which he guarded against chill. It is impossible to determine whether the calculi were recently formed, or had existed long enough to cause the earlier attack in July 1887.

Dr. JAMIESON said, that it was worthy of note that such a number of tolerably large calculi had been passed with so little suffering. He had seen much smaller stones give rise to intense pain. The treatment was doubtless to inject sufficient morphia to relieve the pain.

Dr. MAUDSLEY wished to know what doses of citrate of potash Dr. Bage had administered; had he administered them with the idea of effecting solution? Had there been any previous renal colic or hæmaturia?

Dr. BAGE replying, said that there had not been any renal colic or hæmaturia. The citrate of potassium had been given at first in doses of sixty grains, three or four times a day, and after wards in smaller doses, the object in view being to prevent further precipitation of uric acid.

Dr. JAMIESON then read for the author the following paper :—

ON PLASTIC BRONCHITIS.

By Dr. Ross, Macarthur, Victoria.

Mrs. M. B., age about 50 (of whose previous history I do not deem it necessary to give more, than that she assured me she had never had anything wrong with her chest before), consulted me about a lung disease. She had been to a medical man down country, who pronounced her case to be "congestion of the lungs." As she did not receive any benefit under his treatment, she returned home. As a most careful examination of the lungs did not reveal any disease, my suspicions respecting the former diagnosis were aroused, and confirmed, after questioning her closely regarding "sputum." Having assured myself so far, I requested her to use a glass of water as a spittoon, and bring me whatever she expectorated. A few days later she came to me greatly excited, bringing, wrapped in paper, what proved to be "tube-casts." Although I again asked her to use a glass of water as a spittoon, she did not do so. She told me that the previous night the dyspnœa increased so much that about midnight she called her children to bid them farewell. Early in the morning the dyspnœa reached the climax ; she threw up her hands in an agony of despair from suffocation, and then, all of a sudden, she expectorated the masses, which she said were of no particular taste, but the phlegm which she afterwards threw up both smelt and tasted nasty. I examined her again, but could only detect undefined, sharp breathing. From this time forward she had several attacks, but none so severe. After throwing up the masses she felt much freer in her breathing, but rather weak for some days.

On examination, the masses proved to be covered with slime, and formed into pellets. When put into water they sank, showing casts of bronchi and broncheoli. Lumen could easily be detected in the centre.

As to treatment, I ordered inhalations of alum, and followed Fagge's recommendation in ordering whey. She said she thought the inhalations did her some good. She came in again bringing some more casts. Then I lost sight of her. Some months later I happened to see her, and was informed that she felt quite well.

I do not venture to express an opinion as to whether it was my treatment that cured her, or whether the disease ran its natural course, but am inclined to think the latter.

During my stay in Melbourne, attending the "Medical Congress," I thought it worth my while to look into the medical works in the University library. I was enabled to do so owing to the direction and advice of Dr. Jamieson, and also to the courtesy of the Librarian, to both of whom I tender my sincere thanks.

In studying the case, I paid special attention to the microscopical observations, and will give in the ensuing notes a brief extract of what I learnt. In Reynolds' System of Medicine, Vol. III., page 916, ed. 1871, I find it stated that the tubé casts are true exudations of the surface of the membrane, hollow or solid. Microscopically, they are said to consist of amorphous, or fibrillar material, with exudation corpuscles and fusiform or ovoid cells, mostly non-nucleated; abundant granular matter and some oil globules are also present.

Copland (Vol. I., page 253, ed. 1858), who saw two cases, declares the cast to be plastic albuminous exudation, moulded in the form of the air tubes.

Tulpius mentions them as bronchial polypi.

Aitken (Vol. II., page 557, ed. 1864) says the membrane consists of concentric laminæ, and speaks of the ovoid cells as containing dark colouring matter, such as exists in ordinary bronchial mucus. In other respects he agrees with Reynolds.

In the Transactions of the Pathological Society of London, I find cases of Plastic Bronchitis recorded in Vol. VI., p. 69, ed. 1855, by Dr. Wilks, of Guy's Hospital; Vol. VII., p. 56, by Dr. Crisp; Vol. V., p. 63, by Dr. Peacock, two cases. In the same volume, page 41, Dr. Fuller reports a case. Vol. IX., p. 53, 1858, by Dr. Peacock. Vol. XI., Dr. Hyde Salter relates, at length, a case where he, as well as Dr. George Johnson, found no morbid sound of any kind except in one spot, about two inches to the right and below the right nipple, where over a space about the size of a shilling, was clear and well-developed pneumonic crepitation, which was confined to the end of the inspiration, was long and distinct in proportion to the depth of the inspiration, and was of a true and fine pneumonic type; there was no pain or any other sensation noticeable on the spot. In his opinion, the small casts are detached and passed on to the larger tubes by the peristaltic contractions of the smaller ones, in which they were first formed. The minutest descriptions, both anatomically and microscopically, are given by Dr. Fuller and Dr. Bristow in Vols. V. and IX. of

the Transactions. Dr. Fuller gives illustrations of two casts. He assumes that they are moulded in a bronchus of third or fourth diameter. The trunk is a line or a line and a half in diameter. The membrane is white, firm, elastic, and consists of distinct laminae arranged concentrically, but so slightly attached as to admit of a fine probe being readily passed between them. There is a distinct cavity in the centre of the trunk, though the branches are in places hollow, and contain here and there spots of dark matter.

Dr. Bristow reports that on close microscopical examination, it was seen that the fibrous appearance was, in a great measure, fallacious, and was produced by the edges of delicate, transparent, nearly structureless laminae, closely and concentrically arranged. Between these laminae, corpuscles existed in large numbers, they were more or less globular, for the most part uniform in texture, and solid, but occasionally hollowed out in their interior into a somewhat irregular cavity. Acetic acid produced expansion and partial solution of the laminae, but was without evident action on the corpuscles. Towards the minute ramifications of the casts were compound granular cells, oil-globules, ovoid cells containing black carbonaceous (?) material. The casts were evidently a fibrinous exudation, and had probably been deposited in successive layers. In Vol. IX., Dr. Bristow completes his report. Under the microscope, he says, it represented, in addition to granular matter, oil, compound granular cells and other evidences of degeneration, and a considerable number of large cells of various sizes and shapes. Some of them presented one, some two, and others a still larger number of elongated tail-like processes, and many of them contained from two to four, up to nine or ten, or even a larger number of nuclei. The cells were much like those characterised as myeloid. The nuclei were oval, between $\frac{1}{800}$ and $\frac{1}{500}$ of an inch long, and contained a single nucleolus, and were frequently observed free in the field of the microscope. No cases of Plastic Bronchitis are reported (at least to my knowledge) in the Pathological Transactions from 1871 up to date.

In the *Medico-Chirurgical Review* for the last ten years there was not a single case mentioned.

I find in the English text-books at my command that Broadbent speaks of it as a rare form of bronchial disease. Fagge pronounces this disease as one of the rarest known to physicians.

He states that, at Guy's Hospital, not a single case had been observed during the last quarter of a century. The microscopical report, which he gives, does not differ materially from that of Dr. Bristow. Here, for the first time, the occasional occurrence of Charcot's crystals is mentioned.

Of French writers I have at hand Trousseau's "*Clinique Médicale*" and Laennec's "*l'Auscultation Médiale*." Trousseau's work being "*une causerie d'un homme du métier*," and not "*un livre de doctrine*," I was not at all surprised at not finding this rare disease discussed. More fortunate were my researches in Laennec's great work. The heading of the fifth chapter is "*Des-polypes de la membrane muqueuse bronchique*." There he says he knows of three cases only, he himself saw but one, in a consumptive patient. While describing the "concretion," he states "*On y*" (more central parts) "*distingue déjà quelques petits vaisseaux sanguins bien formés et finiment ramifiés*." By this statement it is evident that his case was not plastic bronchitis proper. In conclusion of the chapter, he expresses his belief that what ancient writers called "*morceaux de chair*" or "*masse de chair*," seem to be nothing but organised blood of a hæmoptœic origin.

In concluding my quotations, I may perhaps be permitted to give the opinions of Niemeyer and Strümpel, the well-known German pathologists. Niemeyer treats this disease as "*croupeuse bronchitis*," and gives as Biermer's opinion—Biermer being the first and most exhaustive writer on bronchitis—that acute cases bear a great genetic affinity to "*laryngeal croup*." Both Niemeyer and Strümpel mention the occurrence of "*Charcot's crystals*." The latter speaks of "*spiralen*" also having been observed. Neither of them attached great importance to any of these observations.

I need hardly point out that, up to a recent date, "*Charcot's crystals*" and "*spiralen*" were considered to be characteristic elements of bronchial asthmatic sputum. As the latest microscopical examination of this subject was made long before our microscopes were brought to such an admirable state of perfection, long before the marvellous staining powers of aniline were made known, I set myself the task of re-examining the casts microscopically, and specially as to the presence of bacteria or micrococci. I must confess that I had a pre-conceived conviction that I would find some.

For my microscopical examinations, I used Leitz's instrument ocular 1 and 3, system 3 and 7. For the more delicate researches, oil immersion $\frac{1}{13}$, ocular 1 and 3, and Abbe's apparatus. I will refrain from giving my methods of staining in detail, and will only mention that I principally used picro-carmin and fuchsin. The casts, when expectorated, are formed into pellets covered with mucus, and when put into water, sink, showing the form of bronchus, with more or less ramifications.

The close resemblance of successively expectorated casts tends to show that they are always formed in the same bronchi and broncheoli. The casts are of a greyish-white colour, either hollow or solid in the centre, moulded in a bronchus of the third or fourth diameter, of rather tough consistence. The main trunk is a line or a line and a half in diameter, up to three or four inches long. Acetic acid produces expansion or partial solution. Lime water dissolves casts.

The membrane consists of distinct laminae, concentrically arranged, and so slightly attached to each other in some places as to allow of a probe to be readily passed between them. Under the microscope, the membrane is seen to show an uneven circumference, with excavations and protuberances. It consists of three, or rather four, different and distinct elements, proved as such by their different aspect, structure, and arrangement, and further, by their different affinity to stains. The different layers do not succeed each other according to any fixed rule, but are rather promiscuously put together; do not blend with each other; nor do all form complete circles. One is sometimes observed stopping suddenly short, while another commences equally suddenly. The layers are in some places somewhat separated, due perhaps to the preparation.

The different layers are—

1. A bright zone, consisting of structureless fibrils or laminae, comparatively few in number, slightly undulating in their course, imbedded in a mass devoid of any structure whatever. Edges show a greater refracting power. Both laminae and the base are transparent, and show no affinity to any stain. Interspersed are granular cells, with nucleus and nucleolus sometimes lying upon the fibrils, sometimes swimming free in the base. The latter fact is made evident by making the light transverse under a suitable angle.

2. This zone consists of circularly arranged serpentine-like bands, of various widths in different places, of a substantial nature.

These bands are made up of undulating fibrils, kept together by an unstainable, transparent matter. In some of these bands very fine lines can be observed, some traversing the whole of them, some part only. The granular cells, few in number, are distributed throughout the whole.

There is another variety of layer, interspersed among the others, which bears great resemblance to the above, lacking only the circularly serpent-like arrangement of its elements. It has in common, that it takes the staining fluid well. It also contains granular cells.

3. The base of this layer is made up of a fine net-work of delicate, structureless, transparent fibrils, which support a large number of granular cells. The whole is embedded in a structureless mass. Neither the latter nor the fibrils take any stain. No tendency to any circular arrangement of its constituents can be observed.

The cells found throughout the membrane are granular, with nucleus and nucleolus made visible by logwood staining. Oil globules of different sizes are observed in various parts of the membrane. Bright bodies are occasionally visible, not quite as long as the diameter of a leucocyte, about a quarter of their own length in width, $\frac{1}{200}$ to $\frac{1}{100}$ mm. thick, clubbed at one end. They are, as a rule, found singly. If one is seen on a coloured piece, the outlines are well defined, the sides plain, the form hexahedron. They do not take any of the ensuing stains—methyl-anilin, fuchsin, anilin-blue, gentiano-violet, picro-carmin, and logwood.

When these bodies are lying alongside fibrils, one is apt to mistake them for parts of fibrils, or *vice versa*. As to chemical tests—ether, alcohol, chloroform, weak lotion of caustic potash (two drops to a watch-glass of water)—do not dissolve them, the latter makes them appear rather more clearly. Lotions of acetic, hydrochloric, or nitric acids, do not affect those bodies when weak. Nitric acid, 1 to 4 of water, destroys the membrane, but leaves the bodies intact. Boiling in caustic potash and water destroys the bodies, whereas the membrane is left a very delicate fibrillar mass. This test seems to point to some of the constituents of the membrane being allied to elastic material. All other chemicals mentioned do not dissolve the membrane, they only convert it into a jelly-like mass.

Again, there are to be seen small, well-defined, round corpuscles, of a bright scarlet colour, which in a certain adjustment, glimmer as they catch the eye. They are dispersed throughout the membrane, but are most easily detected in that transparent matter forming the base of layer Sub. I, where they are seen between the laminae.

In the stained leucocytes they are very difficult to detect, but, at a suitable turn of the micrometer, their bright glimmering colour appears. Where leucocytes lost their stain, those kept it well, which fact made them visible. The corpuscles bear great apparent resemblance to those seen among tubercle bacilli, as regards shape, size, and colour.

The question which now arises is—Of what nature are those bright bodies and those red corpuscles? My opinion is, that the former are crystals, a compound of some albuminous substance; the latter, a micrococcus, whether a specific for this disease or not, I do not, as yet, dare to say.

As my studies were made upon casts preserved in alcohol, I could not make any bacillus culture. Moreover, everyone that knows with what difficulties such culture is attended will agree with me, that it is hardly probable that any bush practitioner could succeed. I, for one, have only met with failures. The reasons are obvious.

Fagge, while discussing the microscopical anatomy of tube casts, speaks of the occasional observation of Charcot's crystals. Now, it is evident that those I mentioned are widely different from these. Charcot's crystals are sharp-pointed rhomboid formations, very different in size, some just visible, others traversing nearly the whole of the microscopical field. They are soluble in water, acids, alkalies, and alcohol, but insoluble in ether.

On the surface of old anatomical preparations preserved in alcohol, crystals are found which will readily dissolve in the tests mentioned. Of course, I found the same on my preparations.

Schreiner, in *Annal. d. Chem.* 1878, conclusively proved those to be disintegration products of albuminous bodies, the phosphate of a new organic base, and so finally disposed of all former hypotheses as to their nature. They are closely related to the so-called "ptomaines." One might suggest that the bodies seen in my preparations are artificial products, but that is easily disposed of by the fact that they are seen in sections unprepared and unstained, whether examined in water, glycerine, or any other suitable medium.

As regards those bright scarlet corpuscles, I am at a loss what to propose, except that they are micrococci. They are neither microcytes, nor nucleoli, nor detritus, for if they were, they would lose their stain whenever those give it off, but they do not do so. The corpuscles are seen in leucocytes, as well as free in the membrane. They are quite distinct from detritus, as shown by their different colour and reaction to light. They differ from granular matter by their retaining the stain. One could suggest that those corpuscles are nothing but the micrococci of putrefaction, but I thought I found a marked difference in their appearance, specially a noted difference in their refracting power when observed while varying the focus. Occasionally one noticed "spiralen." They bear a great resemblance to layer Sub. II, as regards structure and affinity to stain. Some are seen to originate from the periphery, and penetrate somewhat towards the centre. Others are observed running in a vertical direction through the casts. Once or twice I happened to see something which reminded me of "spirillæ." In shape and structure, it was between those seen in febris recurrens and those found in the covering of our teeth and gums. As I observed them only occasionally, I am not sure but that they were not detached pieces of fibrillar material. Considering the casts as complete formations, they are made up of three different elements, formed into tubes and telescoped into one another, two of these tubes themselves consisting of more delicate ones. Sections made under an angle, not quite a right angle, led me to suppose that the vertical tubes are built up of delicate horizontal layers. Should this prove to be correct the casts would show a very complicated structure.

Following the suggestion of Strümpel, I used lime water for preparing, but must strongly oppose his statement. Lime water does not dissolve the casts. I kept them in it for days together. It had the same effect as weak lotion of caustic potash, but not anything like so intense.

On treating the membrane with chloroform, I noticed peculiar changes in the crystals, the true nature of which I am unable to conceive. Of late I tried to isolate the crystals as well as the micrococci, but, I am sorry to say, without success. In my isolation preparations, I see the self-same micrococci, but I do not think many will see them besides myself. I must confess that, as yet, I have not succeeded in staining them so differently and distinctly as to demonstrate beyond doubt their specificity.

After I had concluded my observations, I came across a paper by Dr. Leber, "*Fortschritte der Medicin*," No. 12, 1888. I cannot enter into the discussion and application of the facts related; suffice it to say, that his discoveries evidently and conclusively prove that the mere presence of bacteria and micrococci in the living tissue does not cause the leucocytes to extravasate, but that it is a chemical compound, the product of their being and living, which has the power of attracting leucocytes. When you call to mind that the micrococci are mostly found in that transparent layer, and that, as a rule, next to it appears a layer with more or less abundant leucocytes, you will see that it agrees well with the facts reported above.

At present I am obliged to suspend further investigations, but will take them up again and report same, should they be considered worthy of another examination and discussion.

The following paper was then read :—

NOTES OF A CASE OF ACUTE ENDOCARDITIS.

By F. J. OWEN, M.D.

The case to which the following notes refer, is one of acute endocarditis occurring in connection with an attack of subacute rheumatism, and running rapidly to a fatal issue. The joint symptoms were very slight, limited, and transient; local inflammation seeming to concentrate itself in the endocardial membrane. There were no well-marked special heart symptoms, and the general symptoms were of a more or less pyæmic character. There was a gradual development of valvular disease after the slight joint symptoms subsided—the aortic valve being primarily and mainly affected. Death occurred in about ten days after the first appearance of local cardiac symptoms, and was sudden.

Patient, S. W., æt. 26½ years, married, nursing child five months old. First seen on March 7th, 1889. Had then been ailing for three or four days, with headache, pains in right foot, &c. At time of first visit had moderate pyrexia, headache, thirst, anorexia, coated tongue, swelling in the dorsum of right foot, pain and tenderness in that region, also slight pain, but no swelling, in the left wrist. No definite indication of valvular disease of heart.

On March 11, patient had rigors, with diarrhoea and vomiting, lasting about twelve hours. By this time the pain, and most of the swelling, of the foot had disappeared, but the general symptoms were aggravated, and a bruit was developing with the second

sound at the base. Headache became most intense, chiefly frontal, and intensified by any movement. Steady advance of the disease now took place. There was almost complete insomnia; feeling of great weakness; cheeks flushed, skin hot and dry; pulse quick, at first fairly strong, about 110 to 120; temperature ranging mostly between 102° and 103° late in the afternoon (the time of most of my visits), but on three hot days reaching 104° . The stomach was irritable, with occasional vomiting, and disinclination for nourishment. Stools bilious, dark, but no diarrhoea after March 11. Urine dark and rather scanty. No marked dyspnoea, and no pain over the cardiac region at any time.

On March 18th, the pulse was weaker, about 120, but regular, and remained nearly the same until the afternoon of March 20, the last time patient was seen by me. The face was then paler, and dusky looking. Death occurred at 3 a.m. next day. The husband states that he was attending to patient at that time, not expecting that the end was near, when she turned up her eyes, opened her mouth, gasped and died.

At about the same time as the rigors occurred, as already stated, a bruit, at first muffled, but speedily becoming distinct, was noticeable at the base, soon obscuring the second sound, audible down the sternum, and to a less degree at the apex, evidently indicating aortic insufficiency. Then the first sound at the base was completely obscured also by a bruit, but at the apex was audible, though indistinct, up to the last. The second sound at the apex was replaced by a bruit, which at times was musical in its character. There were no external friction sounds.

As regards treatment, a mixture containing sodæ salicyl. was given at first, but had to be discontinued. In the earlier stages of the endocardial mischief, liq. am. acet., with tr. aconiti, was administered, and later on, quinine and digitalis, but the stomach soon refused any medicine given. To alleviate the headache and insomnia, a mixture containing liq. morphinæ, with ammon. bromide and tr. digitalis, was tried; the hair was cut short; sinapisms to the neck, and hot and cold applications applied, but little or no relief was afforded by any of these measures. Poultices were applied over the cardiac region. Of course the child was weaned.

Patient is said never to have had any previous attack of rheumatism, or any serious illness. She was examined by me about eighteen months before her illness, and when excited

appeared to be affected by a bruit, but on a second examination, there was not marked evidence of its presence.

The symptoms presented in this case would appear to point to destructive inflammatory action, leading to ulcerative changes in the endocardial membrane. In the absence of a post-mortem examination, the exact nature of the disease must be uncertain, and so also the condition of the valves, which led to the comparatively sudden fatal termination. Probably death occurred earlier than it would have done had the mitral valve been the primary seat of the disease, instead of the aortic. The impaired vitality of the nursing mother would also lend its influence towards the same end.

Dr. JAMIESON raised the question as to how far the disease was rheumatic in character. He was inclined to think it one of ulcerative endocarditis, with emboli.

Dr. MAUDSLEY agreed with Dr. Jamieson.

Dr. BALLS-HEADLEY drew attention to the fact that the patient was suckling, and that during lactation there is an excess of fibrine and of water in the blood. Possibly either from debility or from rheumatism the valves became inflamed. Deposits occurred on them, and subsequently emboli. Ulceration might occur in such a weak condition.

Dr. OWEN, in reply, said that the bruit did not appear until after the rigor. Ulceration probably took place in the valves although he could not give a reason for it. He regarded the case as one of ulcerative endocarditis, complicating acute rheumatism. There was no probable infection, and there was no definite indication of the existence of emboli.

A NEW METHOD OF EXAMINING THE NASO-PHARYNX.

By JAMES W. BARRETT, M.D.

Assistant Surgeon to the Victorian Eye and Ear Hospital.

Dr. BARRETT said that for a long time he had experienced great difficulty in making a satisfactory examination of the naso-pharynx, and of the posterior nares. With the oxy-hydrogen light he employed, he could easily examine the anterior half or two-thirds of the nasal cavities, but the examination of the posterior third he had found unsatisfactory. By the method he now employed, he could accurately explore the naso-pharynx and posterior nares in almost every case.

The naso-pharynx and the soft palate are sprayed with a four per cent. cocaine solution, the patient's mouth is then opened and the light thrown in with a reflector. The patient holds his own tongue down with a tongue depressor, the examiner seizes the uvula and soft palate with a pair of eye fixation forceps and draws them *firmly* forwards and upwards. A *large* laryngeal mirror is passed behind the palate, and an accurate examination can be made. The method is not so useful for the purpose of removing tumours as for purposes of examination, as the operator requires three hands—one for the mirror, one for the forceps, and one for the instrument used. He had, however, removed tumours with the mirror and Löwenberg's forceps, the forceps themselves keeping forward the palate.

Dr. MAUDSLEY thought that the introduction of the large mirror, after the use of cocaine, was a point in advance, especially when one remembers the small mirrors which were formerly employed for posterior rhinoscopy.

Dr. BARRETT said that the introduction of cocaine had revolutionised naso-pharyngeal surgery. With the oxy-hydrogen light, and this method of examination, he felt sure that very few morbid conditions of the nose or naso-pharynx could escape the examiner.

The following paper was read at the March meeting of the Medical Society :—

MEDICAL BREVITIES ON RECENT OBSERVATIONS.

By JOHN REID, M.A., M.D., C.M.

Mr. PRESIDENT AND GENTLEMEN,—The least said the soonest ended, so far as introduction is concerned. First, my experience with atropine as a nasal snuff. At 9 a.m., I snuffed, along with bismuth and pulv. acaciæ, about one-eighth of a grain of atropine, for an old-standing nasal catarrh. After copying a letter, I walked out in the hot sun with my umbrella up, and when I had gone about a hundred yards, I found my legs tottering (noted also by an outsider); however, I walked three times as far. On returning, I performed some duties, and at 11 a.m. I went to recline on couch with the intention of reading my *British Medical Journal*, but fell insensible, presumably before reaching it, as I was found lying on the floor with face red and veins large (as I was informed), becoming natural when I was placed on couch, and my dress was undone. I was quite conscious in the afternoon, but owing to my previous boisterous behaviour, and to the

diagnosis of sunstroke, I was kept under restraint in my private hospital till the following morning. About 9 p.m., I was convinced that my urine was smoky—hallucination of sight. At 11.40 p.m., red whiskers appeared black, and I could not recognise some acquaintances. It seems I drank brandy and water very eagerly, but bromide of potash I took to please my attendant, when almost insensible. On the following morning, green grass, &c., was red, but this hallucination soon passed off. I remember having a moist skin, and fairly firm pulse about 7 p.m., but as my watch and clothes were removed, observations were scanty. Mouth was not dry. The usual pugnacity was present.

Hilton, in his work "Rest and Pain," has touched pretty freely on the indications of internal pains, as manifested by the body surface. Immobility, as a sign of diseased lung, has been recognised for a considerable time. Physiologists, describing the phenomena of respiration, have, however, apparently overlooked this phase; and yet there is little difficulty in producing a local immobility over any part of the lung (in the cat and dog at least), by injuring the lung through the introduction of irritants by a hypodermic syringe. Perhaps this statement, based on observations, will lead to further experiments. The abdominal cavity contents, similarly subjected to irritation, give indications of spasm of local character in abdominal muscles. The subject is interesting, but time is short.

Cantharides poisoning has been so frequently and so well described as regards symptoms, that I shall merely remind you of burning in mouth and throat, bowel disorders, &c. It is to the isolation of the cantharidin that my remarks are directed. Woodman and Tidy, and Blyth, give clumsy processes, the latter advising the oil to be skimmed off the urine. The oil is inert, consequently a jury would take little heed of it. Four cases came under my notice; in the third and fourth, I examined articles of diet and the urine. The urine was treated with ammonia, and allowed to stand for a short time, the urine then being filtered. The precipitate is washed, dried, and extracted with ether or chloroform, when the prismatic crystals will be observed, and the blistering effects of a solution (for cantharidin does not blister, save in solution) will be found on the tongue, lips, or other parts. The process is simple, and may be used for morphia, &c. The ammonia filtrate was afterwards treated with acetic acid, when *mucus* (which is abundant in cantharides cases) fell, as well as

colouring matter, giving reactions of "urobilin." I may remark that the urine treated with chloroform to extract "urobilin," gave the substance in the chloroform extract, while that treated with ammonia, and then by acetic acid, failed to yield a chloroform extract of the substance. The urine in a day or two was free from this colouring matter. Fluorescence test was used. The spermatic fluid also contains much cantharidin.

With Christison, I am convinced that the intestinal tract is a very heavy sufferer long before the genital tract is affected, and that the latter seems to be affected concurrently with anal spasms, in a way, however, to make sexual intercourse an experience far from pleasant, and rather to be avoided. The desire to save schemers from the gallows, by giving the means of detection, is the aim of this note (for you will know that, in a Cornish case, tried before the Lord Chief Justice of England, where some of the substance was administered with criminal intent, the prisoner was discharged on the ground that enough had not been given to produce poisonous effects). The method adopted by administrators is the giving of tentative small doses, gradually increasing. Perhaps I may be excused for stating, that glomerulo-nephritis has been experimentally produced in animals by cantharides.

As regards treatment, the symptoms are easily kept within limits, excepting weakness and shaking of limbs. Morphia, even to morphinism, has little, if any effect. Bismuth acts well. Cocaine, drumine, and Müllerine, with limewater and milk, are the best remedies.

Pichi, fluid extract of *Fabiana imbricata*, manufactured by Messrs. Parke, Davis and Co., and recommended as a diuretic (?) tonic, and terebinthinate, was injected into frogs in the undermentioned ways, and with results as follow :—

Frogs (1) and (2) had respectively four and ten minims injected under the back skin, and soon lost the use of their hind legs ; reflex action was soon diminished. At first, the microscope showed quickened pulse, followed by slowing. The animals remained quiet ; at first dragged their hind legs, and very soon—in a minute or so—lost complete power. There seemed to be gasping respiration for a short time, and finally stoppage. Long after the animal appeared to be lifeless, the heart kept beating slowly, and finally stopped, flabby and empty. Post-mortem—The liver seemed, with bowels and mesentery, to contain all the blood ; for the nervous system was pale. Electro-magnetic stimulation showed reflexes con-

veyed from upper to lower limbs, and lower to upper limbs. Before, and soon after death, the lungs were full of air, and red. The results led me to suspect that I had a congener of belladonna and hyoscyamus to deal with, and I was surprised to find that the plant belonged to the solanaceæ, and that in Parke, Davis and Co.'s working bulletin, it was mentioned as acting similarly to Contrexville water!

Frog (3), at 10 a.m. had two and a half minims injected into the tissues of the left tarsus; during the process two quacks were sounded. Pelvis and last vertebral segment tended to the right side, as well as gait. Circulation quickened. At 10.15 a.m. two and a half minims injected at the same place, no quack. Jumps freely for a short time. 10.20, left leg darker, and in partial extension at the tarsus and leg-joint. Numerous large active blood-vessels were detected in the web, as compared with those on the right. Bears handling without struggling; can be touched in any part without producing motion. Patting on back at 10.45, gives puffing up; left leg shows partial extension at both thigh-leg (knee), and leg-tarsus (ankle), the other being in the naturally flexed position. 11 a.m.—Eyelids droop; wont jump if pinched and lifted, but moves fore legs; left leg still darker than right. Battery (electro-magnetic) fore and hind, and also to two hind legs, causes it to jump with difficulty; on either hind leg only contraction results. 11.3 a.m.—Nods head; jumps off the table with strong electric stimulation in very feeble manner, and alights on its back, remaining there. On stimulating the fore and hind leg, feeble dragging motion results, followed soon after by spontaneous feeble movements of all legs, and lying flat, *i.e.*, head and body flush with table, both legs partly extended. 11.5 a.m.—Microscope could not detect circulation, save for a few seconds, and thereafter it ceased in both legs. 11.8 a.m.—Strong stimuli to both legs, and arm and leg gave one or two spasmodic twitches, then one or two spontaneous movements followed, and finally flaccidity. 11.10 a.m.—On opening the chest, the heart beats feebly in rhythm, then a few spasmodic gasps of mouth follow. On snipping off the apex of ventricle with scissors, it is found to be empty, and no bleeding results, but the remainder of the heart continues to beat. A little movement follows in outer chest after the heart pulsation ceases. Post-mortem—Intestines and mesentery appeared to be full of blood; cord and brain pale; flesh of left leg darker than right (hind).

At 11.20 a.m. I injected min. v. through the drum of the right ear of Frog (4). It jumps with difficulty, and alights on its back. 11.30 a.m.—Right fore leg paralysed, lies under the body, to which side the animal is inclined; eyes droop; it only moves slightly when pinched. 11.33 a.m.—Magneto-electric machine gives very faint reaction when poles on both hind legs, or hind and fore leg. Motion on paralysed leg faint on stimulation. 11.45 a.m.—The isolated right sciatic nerve gives no reaction to stimulation, although then the leg contracted on being stimulated, but this effect soon vanished. Leg and arm stimulation caused little shivers of ventral body skin generally; no muscle reaction. Heart, on exposure, beats rhythmically and slowly, evidently contains blood. 12.3 p.m.—Heart quite pale, still beats. 12.7 p.m.—Bared muscles; thigh gave no reaction to stimuli. When poles are placed on fore and hind limb, blood returns to the heart, and at the same time the little shivers are observed. Gradual paling of heart returns. 12.13 p.m.—Heart quite pale; the machine stimulus brought very evanescent blood return, and a slight quiver of skin under the jaw, otherwise no reaction. 12.15 p.m.—Auricle beats twice for one beat of ventricle, rather slowly. Stimulus gave slight return of blood and regular beat for a very short time. 12.20 p.m.—Stimulus leg and chin gave very faint transitory blush in heart; no shivers. 12.24.—Heart pale and flabby; no reaction to stimulus. 12.26 p.m.—Auricle alone beats. 12.29 p.m.—Stimulus seems to bring back faint ventricular pulse. 12.33 p.m.—Heart rises in thorax when stimulus is applied to chin and leg. Pulsation now of auricles scarcely visible. 12.35 p.m.—Decapitated, removing M.O. Heart fills and beats regularly for a short time. It soon again becomes pale, and auricular beating is alone apparent. Before 1.45 p.m. beating had ceased, but the heart was not pale. When decapitated, no bleeding occurred from the head. Post-mortem—Small part behind ear of injected side darker in section.

This very interesting drug, which has apparently been used without mishap in the case of man, would seem to promise to have a good future in store for it, judging from (1) the great effects in the frog, and (2) the harmlessness in man. To draw conclusions from my frog experiments would be premature; the observations are recorded with a desire that the subject may be more thoroughly investigated.

Hospital Reports.

GEELONG HOSPITAL.

Laparotomy for Intestinal Obstruction.

Reported by Mr. J. SMALL, Hon. Surgeon.

During my absence in Adelaide, the following case was admitted to the Geelong Hospital, on Feb. 4, 1889; from this date until the afternoon of the 7th, Dr. Marwood, Resident Surgeon, supplies the notes:—

J. B., æt. 20, groom, complains that he has had no motion for four days. On examination, slight tenderness over epigastrium; soon commenced to vomit green bilious fluid; relieved by sucking ice. An enema brought away a large quantity of scybala. History of similar attack a month previously. Recovered in two days.

Feb. 5th.—Pulse full; temperature normal; good night; no vomiting; an enema given; a few scybala passed.

Feb. 6th.—Restless night; vomited again in early morning, not fecal; abdomen still slightly tender.

Feb. 7th, a.m.—Pulse not so good; inclined to be wiry; temperature normal; enema, with Corrigan's long tube, brought away a good many scybala; feels easier; slept well; soon after this, vomited again; matter gradually becoming feculent; urine normal; great thirst. I was sent for and saw the patient in the afternoon. Thought he would require operation, but symptoms so far justified less heroic treatment. Ordered ice to suck; liniment of belladonna and opium to abdomen; no food by mouth.

Feb. 8th.—Temp. normal; pulse similar; slept well; free from pain; no vomit; tongue slightly furred; after enema, a softer motion was passed.

Evening.—Temp. normal; pulse 144; vomiting soon after morning visit. Considered operation would probably be required, so a consultation was called for noon on the 9th, operation to follow if my diagnosis was agreed to.

Feb. 9th.—Temp. normal; pulse 160; fair night after $\frac{1}{4}$ gr. morph. hypod.; no vomit since previous afternoon.

Consultation of the Staff.—My diagnosis of a band obstructing the ileum, probably low down, was arrived at on the lines laid down by Ashhurst. There was little doubt the site was in the small bowel and volvulus, intus-susception and gall stones were

excluded one by one. This was agreed to, and operation by median section advised.

Operation.—Two sprays were in the room, and strict antiseptics were used. Ether was given by Drs. Marwood and Croker, Dr. Newman took charge of sponges. Patient was brought to the end of the table to allow of my standing between his legs. An incision was made from one inch below the umbilicus, four inches down. No hæmorrhage; peritoneum slit on finger with curved bistoury. There being no meteorism, there was little trouble in keeping in the bowels. On passing my hand to the cæcum, found the large bowel nearly empty, as were some loops of small bowel, which on being traced up, led to the obstruction. This was a band about two inches long and $\frac{1}{4}$ inch in thickness, of a dark colour, attached at one end to a portion of the ileum, and at the other to the mesentery over the spine, about the sacral promontory. Through this was a loop of ileum, not very tightly grasped, of a dull red colour. Two silk ligatures were applied and the band divided between them. To do this, the incision was extended an inch upwards. After sponging with carbolised warm water, silver sutures were passed from within, including all tissues, three superficial silk ones were required. Iodoform was dusted on, and dry salicylic wool applied, and secured by long and broad strips of plaster. Patient bore it well and was lifted into bed, with plenty hot bottles and a $\frac{1}{4}$ gr. morph. given hypodermically.

Evening.—Temp. normal; pulse 144; comfortable, but thirsty; urine drawn by catheter; no flatus passed; morph. $\frac{1}{4}$ gr. hypo. Took and relished some liq. carnis and brandy, also a little milk.

Feb. 10th.—Temp. 99.4°; pulse 152, small; slight feeling of distension; slept well; no vomiting; tongue dry; no flatus; patient feels clammy.

Evening.—Temp. 100°, and pulse 156; evidently sinking, but retained what he took; died at 11 p.m.

Autopsy.—Bowel at site of obstruction was becoming gangrenous; was quite relieved, as was shown by raising it a little when contents flowed past; mucous coat healthy; no other obstruction was present; a mesenteric gland was in the centre of the band.

Remarks.—The want of more urgent symptoms is, I think, accounted for by the character of the band and its not being very tight. Had this case been earlier operated on, in all probability,

the result would have been different, and this is my reason for reporting it. The rapid small pulse was the only constant symptom indicating serious mischief for some days, while in most treatises on obstruction by bands of the small bowel, we are told that pain is severe, vomiting urgent and early, and collapse great. None of these were marked symptoms here. Also as regards statistics, I fancy the mortality is given at too low a rate, owing to many unsuccessful cases not being reported.

Australian Medical Journal.

APRIL 15TH, 1889.

SPECIALISM.

The number of specialists in any town will no doubt be determined in the long run by the laws of supply and demand, and of survival of the fittest. The number practising in Melbourne has undergone a marked increase of late, and it may be of interest to inquire into some of the conditions that have conduced to this sudden growth of specialism, and also into its attendant advantages or evils; for the position of the specialist is one concerning which there is, apparently, some difference of opinion. The first and most natural reply to any such inquiry would probably be, that specialism is simply the outcome of natural causes, and is but a manifestation in the practice of the healing art of what has for long been the rule elsewhere. It is an exhibition, in short, of the great law of sub-division of labour, which prevails throughout all nature, and is especially noticeable in the evolution of organic life. What holds true there also holds, so it is said, in the social and industrial world. This, no doubt, is correct in the main, but to carry out the principle fully, every practitioner ought to be a specialist, and should perform a limited number of functions only—an arrangement for which we can hardly be said to be ripe yet, at least in the colonies. Admitting, however, that specialism is to be accounted for as just suggested, may there not be other reasons for its sudden growth? Thus, the position of a specialist is a much easier and pleasanter one, as

a rule, than that of the average general practitioner. He has regular hours, no night work, and larger individual fees. Having a smaller range, his knowledge of that range is more easily made thorough and exact, and so his work tends to become less anxious and more routine. The work is, presumably, thoroughly congenial, and there is a precision and certainty about much of it which gives it a charm, lacking to the indefinite results of the often befogged physician or general practitioner. When oculists, by correcting difficult errors of refraction, restore nearly perfect vision to previously pur-blind patients, or achieve the same result by extracting cataractous lenses; when gynæcologists, by removing diseased uterine appendages, or by a trachelorrhaphy (in suitable cases), render previously wretched and chronic invalids capable of resuming and enjoying their ordinary position in life they must experience a peculiar satisfaction seldom felt by every-day practitioners, whose typhoids or pneumonias die or get well without much regard to their treatment.

In these charms of specialism lie its temptations and possible dangers. It is now not uncommon for a man deliberately to choose the career of a specialist at the very outset, and to study little else. Such a man is apt to be a dangerous man. No one can be a capable specialist who is not first and foremost a capable and experienced physician and surgeon, and the best specialists are, undoubtedly, those who have gradually perfected themselves in the knowledge and technique of some particular branch while engaged in ordinary practice. To take the same instances of ophthalmology and gynæcology, how wide and how intimate is their relation to general medicine, and how frequently does their practice demand operative interference and the most delicate manipulation. Yet we see men unconcernedly taking up such specialties on the threshold of their medical career, who openly profess ignorance of medicine, or who have never had that surgical training which can hardly be acquired outside a general hospital, and who are, necessarily, practically unversed in the technique of the modern treatment of wounds. Yet such men will talk with the

utmost nonchalance of doing laparotomies, extractions, and so on. Fortunately, the number of such in the colonies is not large, and it is, perhaps, rather a peculiarity of Melbourne, that a number of men practise as specialists in the city and as general practitioners in the suburbs, and that there are very few who really confine themselves very strictly to one specialty. Although such a custom perhaps does not find favour in the eyes of the stricter specialists, there is a good deal in its favour inasmuch as it prevents the would-be specialist getting confined in too narrow a routine.

The effect of specialism on the specialist himself, and as regards the advance of scientific knowledge, forms subject for debate. It depends, probably, almost entirely on the individual, the extent of his general knowledge, and of his interest in subjects outside his specialty. A man like Jonathan Hutchinson can be surgeon, oculist, dermatologist, and even physician all in one, and a specialist in each, and can make one subject irradiate the other. Other men are mere machines, and openly profess ignorance of everything outside their own subject. It is frequently stated that all our advances in scientific knowledge are made by specialists, but it may be questioned whether they, more than others, are not apt to regard their particular branch as very near finality, and to devote their time and energy more to its details and to perfecting its technique than to advancing it as a science; in fact, it is essentially in his superior command of detail and technique that the specialist excels, and not in his appreciation of broad principles, or the discovery of general laws.

The question of the liability of specialists to abuse their position is a delicate one to handle. There is, undoubtedly, a prevalent suspicion that specialists are more apt than others to humbug their patients, and perform unnecessary operations in order to put guineas into their pockets. There are black sheep in every fold, and no doubt they will creep into that of specialism; but, in the majority of cases, this suspicion is unjustified, and has probably arisen because specialists have greater opportunities, especially when

consulted directly by patients who place implicit confidence in them. It is rather a noticeable feature in medical practice here, compared with older centres, that the aid of specialists, and of consultants generally is sought much more directly by the public, and less through the intermediation of the general practitioner, who generally has little power of choice in regard to the consultant in any case; and this circumstance, perhaps more than any other, renders specialism liable to abuse. On the whole, however, it must be conceded, that the evils of specialism are few, can easily be avoided, and are far outweighed by the advantages of a system that is natural and inevitable.

CONJOINT MEETING OF THE MEDICAL SOCIETY OF
VICTORIA AND OF THE VICTORIAN BRANCH
OF THE BRITISH MEDICAL ASSOCIATION—
ADOPTION OF THE AMENDING MEDICAL BILL.

Members of the above Societies met in the Medical Society's Hall on Wednesday, April 10th. It may be remembered that at the meeting on November the 28th last, a resolution was passed affirming the necessity of further legislation. A further resolution was carried, by which the Amending Bill, published in the *Australian Medical Journal* for December 1888, was referred to the Committees of the two Societies for further amendment. This amendment has now been completed, and the members of the two Societies were called upon to endorse, alter, or reject the changes made.

There was a fair attendance. Dr. Balls-Headley occupied the chair.

The meeting decided that the Bill should be read clause by clause, and this was accordingly done. Some slight changes were made, and ultimately the Bill was adopted in its amended form.

It was decided that the Committees of the two Societies should be requested to take steps to have the Bill properly drafted, and placed in legal form, and further, to take such steps as they might find desirable to get the Bill introduced into Parliament.

A vote of thanks was passed to Dr. Neild for the services he had rendered the profession in bringing the Bill to its present stage. The meeting then terminated, having lasted more than two hours and a half.

THE ACTION OF IODOFORM.

The use of iodoform is so very general that it may be of interest to summarise the results of recent observations on its action.

During the past year, evidence has been gradually accumulating to show that iodoform is not a parasiticide. There is complete unanimity of opinion among almost all recent observers, that it hardly interferes at all with the development of the various forms of micro-organisms. It is believed by several observers to have a destructive or antagonistic action on the ptomaines generated by micro-organisms, probably through the free iodine liberated in the wound. This may help to explain the favourable action of iodoform in situations where putrefaction and the formation of ptomaines is almost unavoidable, as in the mouth, rectum, &c. It is claimed for iodoform that it is a local anæsthetic, and that it diminishes wound-secretion. The latter action is also probably due to its destructive action on ptomaines. One result of these investigations has been to try to combine with iodoform other agents that are parasitical. Dr. R. Jaksch (*Pharmac. Post*, Sept. 30, 1888), finds that creolin is a good substance for this purpose, as it both sterilizes and deodorizes the iodoform—it is really antiseptic, and is free from any poisonous action on higher organisms. The researches of Dr. J. Neudörfer are not quite in accord with this latter statement, as he found that the intravenous injection of creolin in dogs had a poisonous effect—a dose of 0.5 gramme to every kilo of body-weight causing death. He states, however, that the danger of poisoning need not prevent the use of the drug, which, as an antiseptic, is preferable to sublimate, carbolic acid, or salicylic acid. In a concentration of 1 to 5 per thousand, there is no fear of poisoning. It has no disagreeable smell; it does not blunt the feeling of the operator's hands, nor the edge of his instruments. It dries up pus, and is hæmostatic. A résumé of recent papers on iodoform, by Freyer, will be found in the *Ther. Monatshefte*, June and July 1888; a paper by Rovsing in *Fortschritte der Med.*, Aug. 1888; and one by Neisser in *Virch. Archiv.*, B 110, H 2 and 3; and an abstract of all in the *American Journal of Medical Sciences*, October 1888; Neudorfer's paper on creolin will be found in *Med. Chir. Centrall.*, No. 28, 1888, abstracted in *Medical Recorder*, Aug. 20, 1888.

Reviews.

The Skin Diseases of Infancy and Early Life. By C. M. CAMPBELL, M.D. Edin. London: Bailliere, Tindall and Cox, 1889.

This little volume of two hundred pages purports to be published especially for the busy practitioner, because, "while the bulk and price of the more recent standard works militates against their being thoroughly studied by those not especially interested in Dermatology, the remarks in treatises on the general practice of medicine are often too bald to afford practically serviceable information." The work thus confessedly belongs to a class much to be deprecated—that of books which are chiefly compilations from standard text books, and for which there is really no very obvious demand, for the general practitioners must be few indeed who could not afford a guinea to pay for or the time to read a work, such for instance as that by Radcliffe Crocker, recently reviewed in the Journal, in which the skin diseases of childhood receive special attention, and which is written by a master hand. The author goes on to state that it has been his endeavour to record the most notable recent views on etiology, pathology, clinical evidences and methods of treatment, "emphasizing those only which have commended themselves as of practical value in a somewhat extensive and extended experience." Where this experience was gained is not stated, but on page 16 reference is made to St. John's Hospital, Leicester Square, an institution that has lately gained some notoriety in the London law courts, and if we are not mistaken, Dr. Campbell was at one time a member of its staff.

The book is a fair *resumé* of the salient points in modern Dermatology, and has, moreover, a practical character that may probably recommend it to busy practitioners, who will be able to glean from its pages many plain and useful directions for treatment. Furthermore, the work possesses a certain personal element that makes it interesting to read. The author draws largely on his personal experience, and occasionally puts forward some original and novel suggestions and observations. It must, however, be very reluctantly admitted, that we cannot help suspecting that the writer's experience and knowledge are not quite all that he would have us believe, and that his indebtedness to others is greater even than it appears. Dr. Campbell is to be

congratulated, however, on the manner in which his information has been assimilated and reproduced. His language is simple and clear, and his style sufficiently dogmatic. The difficulties of classification have been surmounted in a practical and satisfactory manner, and the following quasi pathologico-etiological divisions are adopted:—I. Skin diseases initiated *in utero*. II. Eruptive fevers. III. Chronic non-febrile bacterial diseases. IV. Diseases characterised by capillary flux in the derma. V. Diseases initiated by lesions of the epidermis and its involutions. VI. Neuroses. VII. Parasites. Lupus is placed in Class III., but while Dr. Campbell believes in its microbic origin, he does not accept Koch's statement that the bacilli of lupus and tubercle are identical. The marked clinical differences between the two diseases appear to him to distinctly indicate a difference of origin.

The treatment recommended for lupus is one introduced by the author, and consists in punching out the nodules in the early stage of the disease, and dressing with perchloride of mercury and lanolin. The only objection to this is, that one seldom sees cases where nodules that could be punched out are present. In all his treatment the author is essentially modern, and manifests a strong predilection for new drugs and methods—lanolin, ichthyol, resorcin, iodol, ol. pini pumilio, naphthol, and menthol are frequently referred to with praise, as are several quasi-patent preparations, as olei sanitas, vinolea cream, cimolite, &c.

The explanation given of the pathology of eczema and its relation to erythema is worth recording. Our author supposes that the epidermis of persons subject to eczema is inherently weak and prone to disintegrate. Under stimuli from without or from within hyperæmia occurs, causing increased pressure in the intercellular lymph spaces of the epidermis, a pressure which a normal epidermis is able to withstand, with the result of what is called erythema. When not normal, the cohesion of the epithelium is overpowered, it breaks down, its superficial layer is thrown off, exudation occurs, and then the condition called eczema is established.

On the 1st inst., Dr. Taafe, of Rochester, was shot by a man recently in his employ, who had been accused of misappropriating moneys which passed through his hands. The patient is now rapidly recovering.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee held on the 19th ult., a report was received from the medical superintendent, stating that since the previous meeting of the Committee, 45 cases had been refused admission for want of beds. Mr. Derbin Willder urged the pressing necessity for increased accommodation. The Committee were providing for 26 additional beds, but no fewer than 45 cases had been refused admission. The Government should undertake a scheme for the erection of a large metropolitan hospital. It was a disgrace to the City of Melbourne that such a report as they had just heard should have to be read. Mr. B. Rappiport thought the Committee should bring the matter before the Government, and suggested that a letter be sent to the Treasurer. The chairman, however, considered that such action would be inadvisable, and the matter then dropped.

At the meeting of the Committee held on the 2nd inst., it was reported by Dr. Lewellin, that the Council of the Melbourne University had appointed Dr. Moore, one of the assistant surgeons of the hospital, to act as *locum tenens* for Professor Allen, the lecturer on pathology, and the demonstrator of morbid anatomy, during the absence of that gentleman from Melbourne. Dr. Lewellin pointed out that Dr. Moore, if he accepted the appointment, would have to perform post-mortem examinations, and consequently, might convey contagion from the dead-house to the wards of the Institution, if he were allowed to fill the dual positions of pathologist and assistant surgeon. The action of the University authorities was strongly condemned by the Committee, and they were charged with having transgressed the rules of common sense as well as violated an agreement come to with the Committee some time ago, by which it was stipulated that before any gentleman was appointed as pathologist, his name should be submitted to the Committee for its approval. It was decided to inform Dr. Moore that if he undertook the position of lecturer on pathology, and demonstrator of morbid anatomy, he must immediately discontinue visiting the wards of the Institution, and that his appointment could not be recognised until the concurrence of the Committee in it had been sought by the Council of the University and obtained.

The pressing need of additional hospital accommodation for the sick poor, was again brought under the notice of the Committee at its meeting on the 2nd inst., when the Committee previously appointed to consider the matter, submitted a report on the subject, which was adopted. It stated that it was the duty of the citizens and of the country to provide sufficient hospital accommodation for the sick poor of the community, and that it was not considered to be part of the duties of the Committee of that Institution to provide such accommodation beyond that allowed by the buildings, and money placed at its disposal. The report added that while the Committee might suggest means whereby relief from the present state of affairs might be obtained, it was the duty of the citizens and of the Government to give effect to those suggestions. It was suggested by the Committee that the Government should provide suitable hospital accommodation for chronic and convalescent cases, either at the site of the present Benevolent Asylum or elsewhere, as this would permit many of the beds at the Melbourne Hospital to be devoted to legitimate cases, such as accidents, &c. The medical superintendent reported that during the last fortnight, 58 deserving cases had to be refused admittance for want of sufficient accommodation. It was decided before again appealing to the Government, to endeavour to rouse public opinion on the matter, and with that object in view, a Committee was appointed to arrange for holding a large public meeting in the Town Hall on an early date.

A preliminary meeting of gentlemen interested in providing increased hospital accommodation for the sick poor of the community, was held on Thursday, April 11, at the Town Hall, under the presidency of the Rev. Dr. Bevan. It was explained that the Melbourne, Alfred, and Homœopathic Hospitals were greatly overcrowded, and many deserving cases had to be daily turned away for want of sufficient accommodation. It was proposed to hold a large public meeting at the Town Hall on the 29th inst., for the purpose of enabling the citizens to express an opinion as to how the funds should be obtained for providing that accommodation, and whether the money should be spent in the erection of a large hospital, or in building several small ones in the various suburbs. Resolutions were passed to the effect that the meeting was convinced of the necessity which existed for providing additional hospital accommodation for Melbourne and its suburbs, and appointing a working committee to draft motions

to be proposed at the public meeting. It was decided to invite the co-operation of the clergy of all denominations, and a number of leading citizens, in making the movement a success.

ALFRED HOSPITAL.

At the meeting of the Committee held on the 22nd ult., it was resolved, in view of the great increase in the monthly drug bill, to call the attention of the Hon. Medical Staff to the large quantity of drugs dispensed, with a request that the Hon. Staff would adhere as closely as possible to the Hospital pharmacopœia.

At the meeting of the Committee held on the 29th ult., it was resolved, in consequence of complaints by students, to call the attention of the chairman of the Hon. Medical Staff to the non-attendance of Dr. Thomson, clinical lecturer on medicine, at lectures, with the view of obtaining the services of another member of the Staff, whose attendance at lectures would be more assured.

Dr. W. H. Embling wrote to call attention to the serious loss of life occasioned by patients being sent to the Hospital for treatment when in the last stages of typhoid fever. A large number of patients died within two or three days of their admission, being in a hopeless condition on arrival there. During the week last past, one man was brought to the hospital dying, and only lived seven hours.

WOMEN'S HOSPITAL.

At the meeting of the Committee which was held on the 15th ult., a report was submitted by the Honorary Medical Staff on the deficiency of accommodation existing in the Infirmary Department. The report pointed out that there were at present 165 cases seeking admission to the Department, while the number of beds available was only 23. After some discussion, it was decided that a sub-committee should be appointed to consider the question and to confer with the authorities of the Melbourne and Alfred Hospitals with a view to those institutions providing extra accommodation for diseases peculiar to women, and thus relieving the strain upon the Infirmary Department, while, at the same time, giving additional facilities for medical education.

At the meeting of the Committee held on the 5th inst., a communication from the Medical Students' Society to the Chan-

cellor and Council of the University, and which had been referred to the Committee of the Hospital, was read by Mrs. Shields, the Honorary Secretary. It brought under the notice of the Chancellor the fact that the fees which students were charged at the Women's Hospital for instruction in midwifery were much larger than those charged at the Melbourne and Alfred Hospitals. The Medical Students' Society considered them excessive, and prayed the Chancellor to use his influence to effect a reduction. The communication was received, and consideration postponed until the next monthly meeting of the Committee.

Dr. Praagst was nominated and accepted as *locum tenens* for Dr. Fetherston during his leave of absence, and Dr. T. Kennedy, of Ballarat, was appointed to act as Assistant Honorary Physician in the place of Dr. Praagst.

University Intelligence.

THE MELBOURNE UNIVERSITY.

At the meeting of the Council held on the 13th inst., a letter was received from the Secretary of the Premier, in relation to the complaints about the performance of Professor Allen's University duties. It pointed out that the outside work on which Professor Allen was engaged would soon be finished, that it was very important that Professor Allen should be able to give his time to that work, and Mr. Gillies invited the University Council to make the best possible provision for the discharge of Professor Allen's duties during his occasional absences, the salaries of any officers appointed for the purpose being charged to the Government.

After some discussion, it was resolved—"That leave of absence for one month from the 23rd March be granted to Professor Allen, and that in the meantime, the medical faculty be asked to recommend gentlemen to act as substitutes for Professor Allen, that the work of the chair may go on regularly."

It was decided to advertise, inviting applications from gentlemen willing to undertake for one month, all or part of the duties of Professor Allen.

The following is the result of the final Honour Examinations in Medicine and Surgery :—

MEDICINE, FORENSIC MEDICINE, AND PSYCHOLOGICAL MEDICINE.

First Class.—William Perrin Norris.

Second Class.—Thomas Murphy, Francis John Drake.

Third Class.—Edward Alan Mackay, Edward Leslie Gault.

The scholarship awarded to William Perrin Norris.

SURGERY AND OBSTETRIC MEDICINE, AND DISEASES OF WOMEN AND CHILDREN.

First Class.—William Perrin Norris.

Second Class.—None.

Third Class.—Edward Leslie Gault.

The scholarship awarded to William Perrin Norris.

The following gentlemen passed the examination for the degree of Doctor of Medicine :—

William Andrews, M.B., Ch.B. ; Reginald George Ruddle, M.B., Ch. B. ; Arthur Jeffreys Woods, M.B., Ch. B.

At the Annual Commencement, the following degrees in Medicine and Surgery were conferred :—

B.S.—John Chalmers Baird, Gerald Eugene Cussen, Edward Henry Embley, Charles Herbert Hill, Robert Wilson Hughston, Francis Henry Langlands, Richardson Wakefield Lewers, Percy Herbert Liddle (*in absentia*), Edward Alan Mackay, George Frederick M'Williams, William Perrin Norris.

M.B.—Edward Henry Embley, Robert Wilson Hughston, Francis Henry Langlands, Richardson Wakefield Lewers, George Frederick M'Williams.

M.D.—William Andrews, Reginald George Ruddle, Arthur Jeffreys Wood (*in absentia*). *Ad eundem*—Richard Herbert Joseph Fetherston, Edinburgh.

Vital Statistics.

The Government Statist's Report on the vital statistics of Melbourne and suburbs for February 1889, shows that the births of 1323 children, viz., 693 boys and 630 girls, were registered. The deaths registered numbered 940, viz., 496 males and 444 females. The births thus exceeded the deaths by 383, or 41 per

cent. To every 1000 of the population of the district, the proportion of births registered was 3·15, and of deaths 2·24. One hundred and forty-nine deaths, or 16 per cent. of the whole, took place in public institutions. The number of children under one year who died was 304, the total number under five years being 485.

Under the heading of miasmatic diseases, the returns show a falling off, as compared with January's experience, of 2 in deaths from diphtheria, of 7 in deaths from typhoid fever, and of 81 in deaths from diarrhoeal diseases (simple cholera, diarrhoea, and dysentery). Deaths—chiefly of infants and young children—from debility, atrophy, and inanition also fell from 182 to 118, and deaths from cancer from 28 to 21; but deaths from phthisis increased from 72 to 76. Deaths of women in childbed numbered 6 in January and 5 in February, the proportion being 1 to every 231 births in the former, and 1 to every 265 births in the latter month.

Correspondence.

To the Editor of the Australian Medical Journal.

SIR,—In reply to Dr. Pinnock's letter, which appeared in the last issue of your Journal, I am instructed by the directors of The Liquor Carnis Co. to state that a very probable explanation of the inability of Dr. Pinnock's patients either to take or retain the Liquor Carnis is, that his patients obtained some which had been sent out before the process of manufacture had been perfected.

Quite recently, the machinery required in the manufacture of Liquor Carnis has been altered and improved, and the nauseous flavour of the raw meat complained of by Dr. Pinnock's patients has been thoroughly disguised, making it now not only not unpalatable, but quite the reverse.

The directors also wish me to state that they will be pleased to forward Dr. Pinnock a sample of Liquor Carnis for his inspection and use. The steady increase in the sales show that the preparation is being more extensively used every day.

I am, Sir, Yours, &c.,

ALFRED AYER-CARR,

April 4, 1889.

Secretary to "The Liquor Carnis Co. Ltd."

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—Frederick Miller Johnson, East Melbourne, M.B. et Ch. M. 1886, M.D. Edin. 1888; George Bothwell Douglas Macdonald, Tarnagulla, M.B. et Ch. M. Aberd. 1887; Thomas Washington Bagshaw, Birkenhead, England, M.D. Camb. 1885; John Adam Swindells, Melbourne, M.R.C.S. Eng. 1879; Charles Peyton Moreton, Melbourne, M.R.C.S. Eng. 1864, L.S.A. Lond. 1867; John Adams, East Melbourne, L. et L. Mid. R.C.P. et R.C.S. Edin. 1888, L.F.P.S. Glas. 1888; Frederick John Pacey, Geelong, L. et L. Mid. R.C.P. et R.C.S. Edin. 1888, L.F.P.S. Glas. 1888; George Lockwood Laycock, Melbourne, M.B. et Ch. M. Edin. 1876; Edward Henry Embley, North Fitzroy, M.B. et Ch. B. Melb. 1889; Thomas Warren, Melbourne, L. et L. Mid. R.C.P. et R.C.S. Edin. 1888, L.F.P.S. Glas. 1888; Henry Lawrence, Malvern, M.R.C.S. Eng. 1850, L.S.A. Lond. 1850, L.R.C.P. Lond. 1867; Arthur Septimus Lawrence, Malvern, M.B. et Ch. M. Edin. 1888; Richardson Wakefield Lewers, Eaglehawk, M.B. et Ch. B. Melb. 1889; Francis Henry Langlands, Richmond, M.B. et Ch. B. Melb. 1889; Alexander Corry, Mount Egerton, M.D., M.A.O., R. Univ. Irel. 1885. Additional qualifications registered:—No. 793, Walter Balls-Headley, Melbourne, F.R.C.P. Lond. 1888; No. 807, Robert D. Pinnock, Ballarat, M.D. Glas. 1868; No. 1418, Horace F. Hayes, Caulfield, Ch. B. Melb. 1887, M.R.C.S. Eng. 1888; No. 1290, William Andrews, Melbourne, Ch. B. 1888, M.D. 1889, Melb.; No. 1508, Gerald E. Cussen, Carlton, Ch. B. Melb. 1888; No. 1428, Conway M. Macknight, Melbourne, Ch. B. Melb. 1888. Names of deceased medical practitioners erased from the register:—No. 240, William S. Morris, L.S.A.; No. 167, Eustace J. Walshe, M.R.C.S. Eng.; No. 172, Berkeley W. Hutchinson, M.R.C.S. Eng.; No. 1034, Alexander M'Lean, M.B.; No. 1283, Robert Gilbert, M.B.; No. 325, Henry H. Woolhouse, M.R.C.S. Eng.

HEALTH OFFICERS.—The following appointments have been confirmed:—Shire of Numurkah, Western Riding—Charles Drinkwater, M.R.C.S., to act during the absence on leave for three months of John Johnstone, M.B.; Borough of Tarnagulla—George Bothwell Douglas Macdonald, M.B., *vice* Robert Gilbert, M.B., deceased; Shire of Wodonga—John Hugh Mackenzie, F.R.C.S., *vice* William C. Woods, M.D., left the district; Town of Brunswick—Robert Talbot, M.D., re-appointed; Shire of Arapiles—William Joseph Cross, M.B.; Shire of Bannockburn—Thomas Culbertson Hope, M.B., *vice* Eustace J. Walshe, M.R.C.S., deceased; Shire of Buln Buln—Sidney Adolphus Bernays, M.R.C.S., *vice* John F. Cobb, M.R.C.S., resigned; Shire of Leigh—William Joseph Alleine Moss, M.B., *vice* James B. Donaldson, L.R.C.P., left the district; Shire of Bairnsdale—Francis Alexander Bennett, M.D., temporarily during illness of Dr. Duncan; Borough of Dunolly—John Frederick William Manson, M.B., *vice* John A. Sutherland, L.R.C.P. left the district; Shire of Goulburn—Robert George Reid, L.R.C.P., *vice* James M'Connochie, M.D.

John Dunbar Tweeddale, R.N., M.R.C.S. Eng., has been appointed Acting Health Officer for the Port of Port Phillip, and superintendent of the Quarantine Station, Point Nepean, during the absence on leave of John Henry Browning, M.D.

PUBLIC VACCINATORS.—The following appointments have been made:—*Nathalia*—Charles Drinkwater, M.R.C.S.E., *vice* John Johnston, M.B. whose resignation has been accepted; *Wangaratta*—Edward John McCardel, M.D., *vice* Archibald M. Macfarlane, M.B., whose resignation has been accepted; *Gisborne*—Ulick Arthur Daly, M.B., *vice* G. H. Salter, M.R.C.S., whose resignation has been accepted; *South Yarra*—Charles Louis Lempriere, M.B. (acting) during the absence on leave of Henry Wooldridge, M.R.C.S.; *Stratford*—James Alexander Reid, M.D., *vice* Alexander M'Lean, M.B., deceased; *Tarnagulla*—George Bothwell Douglas Macdonald, M.B., *vice* Robert Gilbert, M.B., deceased.

HOSPITALS FOR THE INSANE.—The resignation of William L. Mullen, M.B., Ch. B., as Junior Medical Officer, Hospitals for the Insane, has been accepted; Henry Augustus Samson, M.B. Melb., Senior Medical Officer, Kew Asylum, has been appointed Acting Medical Superintendent Kew Asylum, during the absence on leave of J. V. McCreery, L.R.C.S.I.

CERTIFYING MEDICAL PRACTITIONER.—The following appointment has been made:—North Eastern District—Edward John McCardel, M.D., of Wangaratta, *vice* A. M. Macfarlane, M.B., resigned.

On the morning of the 23rd ult., Mrs. Reid, wife of Dr. Reid, of Sale, was found dead in her bed. She retired at the usual hour on the previous night, and when found in the morning was quite dead, with a bottle of chloroform in her hand and a handkerchief over her face. The deceased lady, who was near her confinement, was in the habit of taking chloroform to induce sleep, and on this occasion she had evidently been overcome before she was able to put the stopper in the bottle. Dr. Reid was absent in Melbourne at the time.

PROPOSED HOSPITAL AT WILLIAMSTOWN.—Dr. H. R. Maclean, on the night of the 8th inst., read a paper before the local branch of the Australian Natives' Association on the advisableness of a hospital being established in Williamstown, for the purpose of relieving the metropolitan institutions of the numerous cases from Government workshops at Williamstown and Newport, and from the shipping. A discussion ensued, in which Drs. Honman, Molyneux, Figg, Goldie, and Bryant joined in support. Dr. Figg remarked, as chairman of the A. T. Clark Memorial Committee, the fund of which reached a sum of £600, that there was a decided disposition to hand the whole amount over towards the construction of a local hospital. Dr. Honman said that he thought a very suitable site could be obtained from the Victorian Rifle Association. On the motion of Dr. Honman, seconded by Dr. Maclean, it was resolved that steps be taken towards the erection of a hospital in Williamstown.

Dr. Aubrey Bowen, who has been appointed one of the Victorian Commissioners for the Paris Exhibition, and is proceeding to Europe by the outgoing mail steamer, was entertained on Tuesday evening, April 9, at dinner, at the French Club by the Medical Society of Victoria, with which he has been connected for more than 20 years, variously as Hon. Secretary, President, and Treasurer. The chair was occupied by Dr. Balls-Headley, President of the Society, and the vice-chair by Dr. Neild, one of the ex-Presidents. The principal toast of the evening was the health of the chief guest, in proposing which Dr. Balls-Headley referred to the high position Dr. Bowen had always taken as a member of the medical profession in this city, and to the substantial services he had rendered to the Medical

Society, not the least of those being his obtainment from the Government of the land upon which the hall of the Society stands. Dr. Bowen having replied in feeling terms, other toasts and speeches followed, and the company separated about 11 o'clock, after wishing Dr. Bowen a pleasant voyage, an agreeable visit, and a speedy return to this colony. Dr. Bowen was also entertained at luncheon at Scott's Hotel by his fellow members of the Paris Exhibition Commission. Mr. G. D. Langridge, M.L.A., proposed the health of the guest in a highly eulogistic speech.

The report presented by M. Pasteur's representatives to the Queensland Government, on the protection of cattle against pleuro-pneumonia, states that thus far they have been unable to isolate and cultivate the microbes of pleuro-pneumonia, but they have endeavoured to surmount the difficulty by the inoculation of the virus obtained from diseased lungs. This virus placed under the skin develops œdema at the point of inoculation, and this, if inoculated in the cattles' tails, would prevent the pleuro. The report recommends, in connection with the production of the virus, that calves, and not cattle too old or too thin, should be inoculated with the virus from the diseased lung, under the skin of the thoracic walls about the shoulder. The part inoculated gradually swells, and the calf dies in thirty days, yielding enough lymph to inoculate 1500 calves. The question as to whether the subcutaneous liquid inoculated in the tails of the animals would protect them against a second attack had been satisfactorily answered by the experiments, and it was also demonstrated that the virus could be preserved at least for 30 days. The services of Drs. Germont and Loir in connection with the pleuro-pneumonia experiments have been recognised by the Government by the payment of an honorarium of £500 to each.

The Sanitary Commission met on March 19, to finally consider the progress report which is shortly to be presented. The proceedings were conducted in private. An ordinary sitting of the Commission was subsequently held for the purpose of taking the evidence of Professor Kernot and Mr. A. Black, the surveyor-general, as to the most preferable system of sewerage for the metropolis, and the steps necessary to be taken to prevent the pollution of the Yan Yean water supply.

The Central Board of Health, at its meeting on the 5th inst., resolved that exhumation should not be permitted, except to serve the ends of justice, in cases where the patient had died from typhoid fever, erysipelas, diphtheria, scarlet fever, and typhus fever. Mr. Coppin resigned his seat on the Board, in consequence of having lost his seat in the Legislative Assembly; but Dr. Rose said that he intended to take as much interest in the affairs of the Board as previously, and would attend the House and instruct Members of Parliament on the subject.

BIRTHS.

CAMPBELL.—On the 4th inst., at Ardoonnell, Moonee Ponds, the wife of J. Campbell, M.D., of a son.

CUSCADEN.—On the 19th ult., at Port Melbourne, the wife of Dr. Cuscaden, of a daughter.

HOWARD.—On the 17th ult., at North Fitzroy, the wife of G. T. Howard, M.D., of a son.

JAKINS.—On the 8th inst., the wife of W. V. Jakins, physician, Collins-street, of a daughter.

MACGIBBON.—On the 8th ult., at 7 Brunswick-street, Fitzroy, the wife of W. Macgibbon, M.D., of a daughter.

MOORE.—On the 17th ult., at Hotham-street, East Melbourne, the wife of W. Moore, M.D., Ch. M., Spring-street, of a daughter.

SKINNER.—On the 31st ult., at Beechworth, the wife of Dr. Skinner, of a daughter.

VANCE.—On the 6th inst., at the Bungalow, Bacchus Marsh, the wife of Dr. Noel Vance, of a son.

WHITAKER.—On the 29th ult., at Ettrick House, Victoria-street, North Melbourne, the wife of J. Whitaker, M.D., R.N., of a daughter.

MARRIAGES.

BARKER—MANTON.—On the 4th ult., at St. Mary's Caulfield, by special licence, by the Rev. H. B. Macartney, Gertrude Evelyn, fourth daughter of F. J. Manton, of Temba, Domain-street, South Yarra, to Walter Herbert Barker, M.R.C.P., L.R.C.P., B.A. Cantab., M.A., Melb., of Kew, eldest son of Samuel Barker, M.D., of Brighton, England.

GOODALL—DOUGHARTY.—On the 5th ult., at the Presbyterian Church, Elsternwick, by the Rev. Joseph Hay, Charles Edwin Goodall, M.B., Ch. B., son of John Goodall, J.P., of Stradbroke, St. Kilda, to Ada Jessie, youngest daughter of J. G. Dougharty, of Elwood House, Elsternwick.

KEOGH—HEWLETT.—On the 4th ult., Arthur G. Keogh, M.B., C.M., son of Edmund Keogh, Alma-road, St. Kilda, to Edith Louise, only daughter of Thomas Howlett, M.R.C.S., Nicholson-street, Fitzroy.

LONG—FITZARDINGE.—On the 5th ult., at Stoneleigh, Wagga Wagga, by the Ven. Archdeacon Pownall, B.D., Dr. St. Clair A. Long, of Wagga Wagga, son of the late Major-General J. Long, C.G., Ireland, to Katherine Helen, only daughter of H. B. Fitzardinge, Esq., solicitor, Wagga Wagga.

LOOSLI—GOWAN.—On the 7th ult., at St. George's Church, Malvern, by the Rev. Canon Chase, assisted by the Rev. C. J. Godby, M.A., Robert James Loosli, M.B., Ch. B., of Camberwell, to Agnes Elizabeth, eldest daughter of the late John D. Gowan, of Toorak.

DEATHS.

M'LEAN.—On the 14th ult., at the residence of Mr. Jno. Ross, pharmacist, Sale, of typhoid fever, Alexander M'Lean, M.A., M.B., Ch. M., aged 31 years.

WOOLHOUSE.—On the 30th January, on board the R.M.S. Parramatta, Henry Hervé Woolhouse, M.R.C.S.E., son of the late Captain Woolhouse, H.M. 44th Regiment, aged 62.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal

MAY 15, 1889.

Original Articles.

SOME UNUSUAL INJURIES.

By F. D. BIRD, M.B., M.S., M.R.C.S.

I.—FRACTURE OF RADIUS.

A.B., æt. 22, fell with his whole weight on his left hand when skating fast on a wooden floor. The radius, instead of giving way at the seat of Colles's fracture, broke immediately below the insertion of the biceps tendon.

When seen within half an hour of the accident, the pain was excessive on the slightest movement, the hand appearing fixed, so that, on inspection only, it was difficult to say where the injury was. There was no deformity. Crepitus was easily obtained. The fracture was oblique, but the exact direction was not made out, as care was taken not to use much rotation for fear of engaging some fibres of the supinator brevis between the fragments. The hand was placed in a position of full supination, the elbow extended, and the limb fixed to a long straight anterior splint, reaching from the axilla to the wrist, with a shorter splint on the posterior surface of the forearm. Thus, both fragments were in a position of complete supination, as the mechanical stretching of the biceps ensured rotation of the upper fragment.

At the end of a month, union was complete, and the movements of the radius perfect. As showing how little interference with the normal action of the radius there was, rowing was the only exercise in which the slightest inconvenience was experienced, and then in feathering the oar. Even this soon passed away. The preservation of the movements of pronation and supination was, in my opinion, due to the maintenance of both bones in complete supination by the use of the straight splints, which are very awkward for the patient, but most efficacious in fractures of the upper forearm, especially when both bones are broken. In these cases I invariably use long straight splints.

II.—FRACTURE OF NECK OF FEMUR.

On May 13, 1888, Dr. Astles, who had previously been attending the patient medically, called me in to see an injury of the thigh. The patient, a robust young woman, had been thrown a week before out of a buggy on to her right hip, which received the whole of her weight. She was driven home four miles in great pain. When Dr. Astles first saw her, there was much swelling and bruising round the hip, with great tenderness and pain on movement. There was no shortening of the limb, and the foot was neither inverted nor everted. The patient could not move the limb, which was slightly flexed at the hip-joint.

On the 12th May, Dr. Astles found the limb to be shortened to the extent of nearly an inch. The next day he asked me to see the case. Under chloroform, the limb was examined. There was slight enlargement of the trochanter major, due to bruising and not to fracture. The apex of that process was distinctly above a line drawn between the anterior superior spine of the ilium, and the tuberosity of the ischium. Extension of the limb brought it down to the same length as the uninjured, but the shortening immediately recurred on leaving off extension. On rotating the limb gently, the trochanter revolved too freely, and on a radius shorter than normal. There was no crepitus until extension was applied, and then it could be easily made out. No fracture of the acetabular margin could be detected. With good extension for some time, and the application of a long splint, great care being paid to the straightness of the pelvis, this patient made a good recovery, and now walks very well.

An intra-capsular fracture of the neck of the femur in a healthy young woman, caused by direct violence is a rare accident, the interest of which was increased by the behaviour of the cervical prolongation of the capsule, which, by its integrity, prevented the ascent of the trochanter, but which, when softened by inflammatory action, was unable at the end of a week to counteract the action of the muscles attached to the pelvis and thigh bone, thus allowing of nearly an inch shortening in the length of the limb.

III.—FRACTURE OF SECOND RIB.

Mrs. M., lifting one side of a heavy chest, felt a sudden tearing pain in the front of the left side of her chest and down the left arm, which became powerless.

The next day, the 20th of March, she consulted me. To my surprise, on making a careful examination, I detected crepitus, and there was evidently a fracture of the second rib on the left side, about one and a half inches from the costal cartilage.

About fourteen years previously, this lady had received an injury over the upper part of the left side of the chest, which soon got well, and never troubled her since. There is no history of syphilis. Strapping, and the application of a Martin's bandage, effected union in the rib, since which she has suffered no pain whatever in the part.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, MAY 1ST, 1889..

(Hall of the Society, 8 p.m.)

Present:—Dr. Balls-Headley (in the chair), Drs. Barker, Armstrong, Barrett, F. D. Bird, Fletcher, Grant, Joyce, Jamieson, Neild, Maudsley, Snowball, Syme, Webb, and Workman.

The minutes of the preceding meeting were read and confirmed.

The following gentlemen were then elected Members of the Society:—James Carnegie McMullen, L.R.Q.C.P.I., of High Street, St. Kilda, proposed by Dr. Davenport and seconded by Dr. Barrett; Joseph Ross, M.D., Wurzburg, of Macarthur, proposed by Dr. Jamieson and seconded by Dr. Barrett.

Two gentlemen were nominated for membership.

Dr. SNOWBALL exhibited a case of Spina Bifida, and read the following notes of the case, reported by Dr. STAWELL:—

A. D., æt 3 weeks.

November 26, 1888.—History.—The mother had two miscarriages before patient was born. The mother states that five weeks before giving birth to the child she fell down some steps and bruised herself on the lower part of the back, the pain was considerable, and lasted some time, "as if it had gone inwards." The child is well developed, is at the breast, has had no convulsions, no paralysis.

On examination, there is a fluctuating tumour, round and prominent, measuring about two inches in diameter, and situated in lumbo-sacral region. There is a small granulating spot about the centre of tumour, the rest of surface being covered with normal cutaneous tissue.

Treatment.—A small amount of fluid removed by the hypodermic needle (a colourless limpid fluid), and then, with patient lying on his side, 10 minims of Morton's iodo-glyceride was injected, and patient immediately placed on his back.

November 30, 1888.—No fluid withdrawn, 10 minims of iodo-glyceride injected, very slight hæmorrhage, stitch inserted. Covered with absorbent wool.

December 3.—The tumour is smaller and non-fluctuating. Patient appears to be thriving.

January 1, 1889.—Tumour entirely disappeared. Patient well and strong, never had convulsions.

January 4.—Patient well and strong. On examination, there is a small fluctuating spot on the flattened and hardened surface of the original swelling. From this spot fluid was evacuated, and about 5 minims of Morton's solution injected in the manner already described.

April 5.—Consolidation taking place. Patient well.

April 9.—Mother states that patient has been in great pain, and that the place is running. On examination, an eczematous condition is noticed. Pulv. sod. 1 grain and wool applied.

April 12.—Healed and hardened. Patient seems well and free from all pain.

Dr. MAUDSLEY said this was the most satisfactory case of Spina Bifida he had ever seen. Most of the cases he had seen had died of hydrocephalus and other complications.

The following paper was then read :—

SYNOVIOTOMY.

By F. D. BIRD, M.B., M.S., M.R.C.S. Eng.

Two operations for the remedy of chronic disease of the synovial membrane have recently been introduced. The one, arthrectomy, aims at the total removal of the diseased membrane, and is a large and laborious operation, the great advantage of which is the excision of what might otherwise become an infecting tubercular centre; and the other, formulated by Mr. Fitzgerald, consists of subcutaneous multiple incisions into the

swollen membrane, and the drilling of the component bones of the joint. This proceeding, which may be called subcutaneous synoviotomy, has for its main excellence its simplicity and absence of danger, although it does not remove the possibility of a general infection starting from what may be a tuberculous joint. The following case, the condition of which, when I first saw it, almost invited amputation, will illustrate the good results, and the method, of the latter of these two operations :—

C. M., *æt.* 19, first consulted me about his knee July 11, 1887. He was then looking very ill, with a hectic flush on either cheek. He was very lame, having to use crutches. He was wasted and feverish, and, from his brother's account, was rapidly getting worse. His knee had been diseased for seven years, during which time a variety of treatments had been adopted. In 1885 a free incision, the mark of which can still be seen, was made apparently into the joint on the inner side, to let out pus. In these seven years the knee had been better and worse, but had never affected his general health so much as now.

An examination of the limb revealed much wasting of the muscles of the thigh, some enlargement, though not much, of the lower end of the femur. The joint was slightly flexed, and could not be completely extended. There was a small amount of movement, and the patella was not quite fixed. A small sinus over the upper part of the outer condyle allowed the discharge of sero-pus; no dead bone could be detected at the bottom of this sinus. Much swelling of the synovial membrane existed over the upper and outer and upper and inner aspects of the joint. There was tenderness on pressure in these positions, and much pain on movement. Palpation of the tumefaction gave the sensation of doughiness, not of fluid. Pressure on the patella gave no pain, neither did approximation of the cartilages. I sent the boy home to bed, put the limb on a back splint, and smeared the knee with *Ext. Belladonnæ*. Internally, a saline evacuant was administered, and the following syrup :—

Rx Syrupi Calc. Hypophosphitis, gr. iij. ad 3 j.
Syrupi Ferri Iodidi, ʒ ij.
Syrupi Prun. Virginicæ, ʒ ij.

A teaspoonful four or five times a day.

After three weeks of rest, the boy's general condition had decidedly improved, but the knee seemed almost the same. Another three weeks with the joint in Scott's dressing did no local

good. Under chloroform, I divided the hamstring tendons and drilled the femur in several places, the outer shell of which was very thin indeed, and the interior very soft and laden with fat from chronic inflammation and disuse. The synovial membrane was then sliced freely on both sides of and above the patella with a long tenotome, in this way the swollen tissue was scored in ten or more places; there was more hæmorrhage than usual in this case. Sponge pressure was firmly applied, and the limb placed on a splint; there was no pain afterwards. At the end of a fortnight the tenderness had entirely gone, except at one point on the inner side, where there had been some extravasation of blood, and the swelling was much lessened. The boy's health rapidly picked up and is now very good; instead of looking as if he were dying of hectic, he has become strong and healthy. His limb is a useful, painless one, and more motion is obtained than before.

About two months ago I endeavoured to obtain greater movement under chloroform, but the adhesions were apparently too old to be snapped, except some under the patella. (Dr. Bird here mentioned a method of breaking down adhesions under the patella.)

Two, to me, very instructive points were shown in this case:—First, on the inner side of the joint during the operation, a small collection of blood had formed before pressure could be exerted upon it. This spot remained tender for a long time after the rest of the joint was painless on pressure. Mr. Fitzgerald has recently performed all his subcutaneous operations, except simple drilling, in a field rendered bloodless by the application of Esmarch's bandage, which is not removed until the operation is ended. Second, bandages applied in proper position. This is a great advantage, as effused blood has undoubtedly to be absorbed before any reparative changes can go on, as we see in simple fracture, with much effusion, and in tenotomy where blood-clot is a great hindrance to perfect reparation.

Again, in all these old knee-joint cases, the component bones are the seat of general inflammatory and degenerative changes, which are not confined to the immediate vicinity of the articular cartilages, and which, therefore, cannot be provided for in the operation of arthrectomy. I am sure that drilling is as needful and as useful in the degenerative changes which take place in a disused bone (which changes are analogous to those of chronic inflammation), as it is in chronic and sub-acute osteitis. Here then, we have an

operation which can be undertaken without fear of septic results, which is simple in its performance, which attacks the disease in the bones as well as in the synovial membrane, and which if it should do no good, as I have once seen, can do no harm. Its chief disadvantage of not removing a possible tuberculous centre is mitigated by the fact, that it is impossible to tell when a joint is tubercular until very late stages are reached.

Dr. SNOWBALL said the difficulty in such cases was to tell which case will be improved by drilling and tenotomy, and which will not. He had treated very many cases of scrofulous disease of the joint in this way, and was not at all pleased with the result. Dr. Bird's case was of seven years' duration, and was consequently not tubercular, and, as it happened, the result obtained was better than that which would have been obtained by excision. The difficulty was to distinguish between scrofulous disease of joints and chronic synovitis without affection of the cartilage; if the cartilage is affected, this operation is not of much use, and as excision in childhood is unsatisfactory, Dr. Snowball preferred to incise the joint, drain it, and so get a stiff joint. The operation Dr. Bird had described would probably be useful in picked cases.

Dr. BALLS-HEADLEY was inclined to believe that the question was very much one of diagnosis, and that in this case Dr. Bird had accurately fitted diagnosis and treatment.

SPECIAL MEETING.

The PRESIDENT moved:—"That Rule VI. be amended by the substitution of the words 'two guineas' for 'one guinea' after the words 'annual subscription of;' and by the addition of the words 'which shall include payment for the *Australian Medical Journal*' after the word 'guineas.'" The object of the alteration is to increase the funds of the Society. At present, the income of the Society was just sufficient to keep things going, and consequently when the hall needed repairing, or when books needed binding, no funds were available. If the resolution he had proposed was carried, the Society would make a profit of seven shillings per annum per member on the Journal. Before bringing this matter before the Society, the Committee had taken a *plébiscite* in order to ascertain the feeling of members on the subject, and the result had been that 63 members voted in favour of the proposal, and 10 against it.

Dr. NEILD had great pleasure in seconding the proposition. Thirty years ago, when the Society possessed neither hall, library, nor yet a large roll of members, the subscription was two guineas, subsequently it was reduced to one guinea without any special reason. Of late years, funds were always short, and the indefatigable and energetic librarian was constantly hampered in his efforts by want of funds.

Drs. WORKMAN, JOYCE, and BARRETT briefly commented on the proposed change, and the motion was then put and carried unanimously.

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MEETING.

Wednesday, 24th April, 1889.

(Hall of the Medical Society, 8 p.m.)

The President, Dr. Fishbourne, occupied the chair, and there was a good attendance of members.

The minutes of the previous meeting were read and confirmed.

The President exhibited a case of sporadic cretinism, which formed the subject of the following paper:—

A CASE OF SPORADIC CRETINISM.

The rarity with which cretinism in any form occurs in Australia, justifies me in bringing this interesting case of the sporadic type of the disease before this Association. At the meeting of the Intercolonial Medical Congress in the beginning of this year, Dr. E. C. Stirling, of Adelaide, described six cases of sporadic cretinism as having come under his notice in South Australia, five of these occurring in one family. Dr. Norton Manning also contributed an able and instructive paper, giving a description of one single cretin he had met with in New South Wales, during a twenty years' experience. The case I am about to describe is the only one of the kind I have ever seen, and, as far as I know, is the first noted in Victoria. Cretins, as you are aware, are "persons who suffer from some lesion of the intellectual faculties, more or less analogous to that observed in idiocy, but with which is uniformly associated a characteristic vicious con-

formation of the body, an arrest of development of the entire organism." The most marked and constant peculiarity about the sporadic cretin is the absence of the thyroid body, and the presence of certain curious deposits of fatty tissue in the region of the triangles of the neck, and above the scapulæ, which are not observed in other diseases, except that analogue in the adult of sporadic cretinism in the child, viz., that peculiar disease, named by Dr. Ord myxœdema. In the latter also, there is apparently atrophy of the thyroid gland, and fatty deposits developed in the neck as the disease advances. In endemic cretinism, on the contrary, there is a total absence of these deposits of fat, and in a large proportion of cases there is obviously a distinct enlargement of the thyroid or goitre. A Royal Commission, appointed by the King of Sardinia, for the study of cretinism, reported that the sporadic form is found in narrow, ill-built, over-crowded towns. This, however, does not apply to any of the cases found in Australia, nor to many of those reported in England. The person I am about to describe was born in New Zealand, so that as yet, so far as I can ascertain, no native of Victoria has been noticed suffering from this peculiar disease.

Her father, who has kindly afforded me every assistance in enquiring into and describing this case, is a well-to-do, intelligent Englishman, born of healthy parents. He came to Australia at the age of two years, and since his arrival at man's estate he has been engaged in the liquor trade. He drinks a little, never to excess, and he assured me that, before the birth of this child, he had never once been the worse for liquor, and only twice since then. There is no history of insanity, epilepsy, or nervous disorder in the family of either parent, nor of specific disease.

At the time of marriage the father was 27 years of age, strong and healthy. His wife, also English, was a vigorous woman, aged 24, fairly tall, and very good looking. At that time he was managing an hotel at St. Bathans, Otago, New Zealand, a digging township in the mountains, and neither he nor his wife took any intoxicating liquor. Ten months after marriage the subject of this paper, a girl, was born. The father states that it was a tedious painful labour, but was completed without instruments, although a doctor was present. The mother suffered so from gathered breasts that she was unable to nurse, and the child was fed on goat's milk. The baby seemed to thrive like any other child; it cried more, however, and was more wakeful

than the other children, but this was attributed to want of experience with babies.

Children followed fast, 7 in 7 years. The second child, a girl, born within 15 months, is now alive. She is in good health, very intelligent and good looking. The next two, also girls, died from diarrhoea at the ages of $2\frac{1}{2}$ and 2 years, showing no signs of any peculiarity. The next (5th), a girl, is now alive, and is like her second sister. The sixth, a girl, died from diarrhoea, aged two years, having shown no signs of deficiency. The seventh and last, a boy, is now alive, aged 16, a sharp, intelligent lad. None of those alive suffer from goitre. All the infants were fed on goat's milk. The mother has since died of lung disease.

At 14 months the second child had far outstripped her elder sister; she could walk, and had cut a number of teeth; whereas the elder child had no teeth, and made no attempt to crawl or walk; she could, however, call papa and mamma, and express her wants in her own peculiar way. She was thought to be in every respect a healthy, though backward, child. When 18 months old she suffered from a mild attack of measles, since which time her eyes have always been weak. She commenced to cut her teeth at three years of age, without trouble, and to walk at four, which has always been with a peculiar waddling gait. The idea of there being any deficiency of intellect or bodily conformation seems to have dawned very slowly on the parents, although it undoubtedly commenced at a very early age. She now remains as a child of about the age of 20 months. She is $24\frac{1}{2}$ years of age, and is an excellent sample of a cretinoid idiot of the sporadic type. Her height is $32\frac{3}{8}$ inches, weight 36 lbs. The circumference of her head is $20\frac{3}{8}$ inches. Vertical measurement from insertion of ears $11\frac{1}{8}$ inches. The head is well shaped; the face broad and flat; the eyes, which are far apart, are not able to endure the light, and the conjunctivæ are congested and swollen. The sight, however, as well as the other senses, is fairly acute. The nose is flattened, the mouth large, the lips thick and kept closed. For some years the tongue is said to have always been visible, and the mouth open, but, by constantly drawing her attention to it, she has acquired the habit of keeping it closed. The tongue is large, filling the mouth; the teeth are fairly sound and regular, though discoloured, they are the temporary or first set of teeth, but she is now beginning to cut the second or permanent teeth, one upper incisor is through, and

has displaced the temporary tooth, another is fast appearing behind the incisor of the opposite side. The ears are well-shaped and small; the hair brown, and in long ringlets. The figure is broad and the abdomen protuberant; there is a small umbilical hernia. Considerable anterior curvature of the spine has taken place. The chest girth is $20\frac{1}{2}$ inches, abdomen $23\frac{1}{2}$ inches, the arms from acromion to tips of fingers $13\frac{3}{4}$ inches; the hands and feet are wrinkled and aged-looking, and are somewhat large in proportion; the legs are bowed, and rather wasted from want of exercise; the breasts look somewhat protuberant, but it is merely with fat; there is no glandular enlargement nor sexual development, nor is there hair on the pubes, in the axillæ, or on the back; the thyroid gland is apparently absent altogether, and above the clavicles, in the triangles of the neck and above the scapulæ, are the peculiar fatty swellings—loose and soft to the touch, feeling almost emphysematous—noticed in these cases. The skin of the head, body, and limbs is dry and scaly; it is loose all over the body. The palate is not abnormal; there is no fœtor of breath. Pulse 84, temperature 98° . Perception is not very dull, but speech is slow and monosyllabic. She can name all ordinary articles about her, so as to be understood by her family; she calls all coins a pound, and has no idea of their value; she appreciates numbers up to three, not beyond; she is cleanly in her habits, but requires to be dressed. No systematic instruction has been given to her. She appears to listen when conversation is going on, and answers promptly if suddenly addressed; she is very good-tempered and easily managed, playing with toys and dolls all day, or picture-books, but she likes a dark room on account of her eyes; she is imitative, and likes a little fun. Her clothes and toys last for many years. She sleeps on her face, chest and knees, and is so quiet on being put to bed that no one knows how much she sleeps, as she does not stir from one position; if suddenly spoken to at any time during the night, she answers at once as if she had been awake.

The cause of this disease is as yet undecided.

One theory, which is supported by Virchow is, that there is an abnormal tendency for the basilar portion of the occipital bone to coalesce (by ossification of the discs of cartilage which should separate them) with the two portions of the sphenoid bone; the base of the skull thus becoming modified in form, leading to defective development of the corresponding portion of the brain,

and to wide-spread changes in the osseous framework of the skull and face. The same tendency is shown by the bones of the extremities, which become united with their epiphyses, and thus become incompletely developed.

Drs. Hilton Fagge and Fletcher Beach, in the post-mortem examinations made by them on sporadic cretins, found that this premature ossification did exist. There appears to be no connexion with scrofula, rickets, or syphilis, the parents being generally strong and healthy, not consanguine, and without history of insanity or nervous disease.

Dr. Baillarger thinks that the inactivity of the generative organs is responsible for the disease; and Dr. Langdon Down, that in the majority of cases seen by him, there was reason to believe that procreation occurred during the drunkenness of the father. Other observers have not found this to be a cause of the disease, although it is admittedly a cause of idiocy.

The supra-scapular fatty deposits, which are not glandular enlargements, or defined tumours, but simply an increase of fat, deposited without investing envelope, and which appears to be drawn upon, should the cretin suffer from wasting disease, are peculiar to this disease and myxœdema. The absence of the thyroid gland, as far as can be ascertained, has, I believe, been observed in every case of sporadic cretinism except one, reported by Dr. Hilton Fagge in the Transactions of the Pathological Society of London, 1874. In this case the thyroid was of some size, but in its right lobe it contained a tumour the size of a walnut. The fact of the presence of goitre, or hypertrophy of the thyroid, in endemic cretinism, and the absence of the gland in sporadic cretinism, is interesting, and requires explanation. So also the absence of the fatty deposits in the one, and their presence in the other. As yet, no sufficient explanation of this has been forthcoming. Will cretinism ultimately be found to owe its origin to some vital impairment of the thyroid gland? The same cause also operating in myxœdema.

I am largely indebted to the interesting contributions of Drs. Manning and Stirling, before alluded to, for most of my information regarding this uncommon disease.

Dr. HENRY remarked that though he had seen many cases of the endemic disease in the high valleys of the Tyrol and Switzerland, this was the first case of sporadic cretinism he had

seen. He considered the condition a rare one. He remarked on the influence of residence in a valley, dampness of soil, absence of sunlight, the character of the drinking water, the marriage of near relations, the presence of goitre in the parents, in the production of endemic cretinism. He enquired as to the age at which the condition came on, and whether the patients were always stunted in their growth. He was struck with the adult character of the pulse.

Dr. SPRINGTHORPE congratulated the Society on the opportunity Dr. Fishbourne had given them of seeing such a typical case of a rare disease. He noticed that the patient had been born in New Zealand, in the Province of Otago. His impression was that the district was hilly, that there were extensive ranges of magnesian limestone, and that goitre was endemic. At any rate, he had seen several cases of goitre from that district. He enquired as to whether the skin, which was now wrinkled and hanging almost in folds, had ever at any time been tense and filled out, as in myxoedema.

Mr. KENNY inquired as to the history of goitre in the family, of any tubercular family history, also as to the conditions of the heart sounds.

The PRESIDENT replied. The condition generally became manifest in the first dentition, and occasionally up to between eight and ten years of age. Dr. Stirling (Adelaide) had five cases in one family, commencing apparently at different ages. There was no tubercular history in the family, and no history of goitre. The skin had never been swollen or infiltrated with mucus. He alluded to Virchow's theory of early union of the bones at the base of the skull, during foetal life, and subsequent non-development of the brain.

The following paper was then read :—

TWO BRAIN CASES CONTRASTED.

By J. W. SPRINGTHORPE, M.A., M.D., M.R.C.P. Lond

Physician to the Melbourne Hospital.

I desire to bring before members two cases, which illustrate problems in brain localisation. One was proven by post-mortem demonstration to be a brain tumour in a somewhat rare position, yet localisable before death with a good deal of precision. The other is a case which was long undoubtedly very obscure, which seemed largely explicable upon the hypothesis, that there existed

a tumour in the right temporo-sphenoidal region, but which, apparently, though to some extent localised in its symptoms, seems after all to have been due to peripheral irritation.

C. J., æt. 22, bottle washer, admitted into the Hospital July 19, 1888. His statement was that, five weeks before, he was suddenly seized with very violent pain in the stomach, "causing him to fall and strike his head." Since then, he suffered from severe, almost incessant, headache in the occipital region, with attacks of vomiting, stomach pains, faintness, staggering gait, and confined bowels. He had enjoyed good health previously, except for an attack of syphilis, and attributed his head symptoms to the fall.

On admission, the temperature was 100·5°; the pulse weak, regular, 66 to the minute. No signs could be found of fracture of the skull, or of local injury. There were large symmetrical scars on the legs, and a small pustular rash on the body, with some enlargement of the glands in the groin, but no scar on the penis. The heart and lungs were normal. Further examination disclosed the presence of the cardinal symptoms of brain tumour—headache, vomiting and double optic neuritis. The headache was of the usual cerebral character. At first occipital, it soon became vertical, then frontal, finally all over the head, the change in site representing partly the growth of the tumour, partly a pachymeningitis which was found after death, and partly, also, neuralgia of the fifth. The vomiting became less as the disease progressed, and sufficient milk and sago were retained to support life. The optic neuritis was very marked, increasing during his stay in Hospital. There was no choroidal atrophy, but large patches of opaque nerve fibres. Localising symptoms were present from the first. There was the cerebellar gait. Patient was unable to stand with the feet together, reeling backwards and to the left side, without the ataxy, pains, and knee phenomena of locomotor ataxy. There were signs of pressure on the central ends of the spinal accessory. The head was retracted, and at first to the left side more than the right, with pain and rigidity in the sterno-mastoid and muscles of the back of the neck, mostly disappearing within ten days after admission. The vagus showed its implication by the vomiting, frequent yawnings, and slight alterations in the heart rhythm, the pulse being taken every two hours. Here also, the signs diminished as the tumour pressed forwards. Examination of other cranial nerves showed the extent and progress of the disease. Hearing in the right ear was blunted within the first

week, almost to bone deafness ; there was no paralysis, however, of the right facial or hypoglossal, though the facial showed signs of slight irritation. The right sixth, however, was paralysed soon after admission, without any abnormality in the third and fourth. Towards the last fortnight, however, pressure symptoms here also were apparent. There was increasing affection of the sight, immobility of the pupils, and finally, distinct double ptosis, all more prominent in the case of the right side. The tumour thus neared the corpora quadrigemina, and there were the ataxy, the loss of sight, and loss of action of pupils, which accompany pressure upon the anterior pair, and the loss of upward movement, which is thought to follow affections of the posterior pair, but as the valve of Vieussens, and the origin of the third nerve were also implicated, it is impossible to say how far these symptoms may not be due to associated injury of the latter structures. There was, however, no poly-uria or poly-dipsia, such as are considered to accompany lesion of the pineal gland, though the mental functions showed signs, which, however, may be ascribed in the present instance (as the post-mortem showed) to venous obstruction, serous effusion, and advancing meningitis. These were, that the mind first clear, almost bright, became gradually more and more stupid, and that consciousness gradually passed into unconsciousness, drowsiness, and delirium.

There are few other points to be noted ; there was no paralysis of any of the extremities ; the bowels could be kept open by mild aperients ; there was no retention of urine. Suddenly, three weeks after admission, a patch of localised infiltration, about six inches in diameter, appeared in the mid upper sacral region, and within two days discharged pus from five apertures. It almost healed, but, a few days before death, another small bed-sore appeared, apparently from the urine which was then passed involuntarily. Patient died five weeks after admission.

At the post-mortem, Dr. Mollison found the tumour which you have before you. It originated apparently in connection with the peri-vascular sheaths of the plexus, which enters the fourth ventricle, pressed first upon the left spinal accessory and vagus, then upon the right also ; possibly both hypoglossal nuclei and nerves escaped from their deeper position. Spreading forwards and towards the right side, the tumour pressed upon the right sixth and eighth nuclei and fibres, the seventh almost escaping, being like the hypoglossal, deeper-seated. The fifth also seems to

have been somewhat implicated. Nearing the valve of Vieussens, the third and fourth were also affected, and finally the corpora quadrigemina. There was in addition considerable serosity about the plexus, and increase of fluid in the ventricles, more especially the right. Elsewhere there were apparently syphilitic plaques in the surface of liver and spleen, and a large gumma (?) breaking down in the capsule and cortex of the left kidney. With the exception of a small calcified cicatrix and puckering at each apex, the lungs were normal. The diagnosis during life had been specific meningitis, with a gumma at the base, spreading from the junction of the cerebellum and cerebrum on the left side forwards and to the right. Instead of being external to the brain, however, as was supposed, it was found to be in the fourth ventricle.

The other case exhibits the great difficulty and uncertainty that sometimes attend nervous phenomena, which are very marked but indefinite, and how localised may be the effects of peripheral irritation.

In March 1887, I saw patient, æt. 34, at Ballarat, in consultation with Dr. Pinnock. She had been in good health until five years previous, never having had to consult the doctor except for three pregnancies. Then, however, after a threatened miscarriage, she had a septicæmic attack following retained placenta, the child being carried to full time. From that illness she dated all her troubles, and, for twelve months at least, was a complete invalid from head and gastric symptoms. She was seen by many medical men, and all sorts of diagnoses made, amongst others, Addison's disease, cerebral aneurisms, &c., and it finally became a question whether there was not some brain tumour, and if so, was any operative interference advisable, her life being a perfect burden to her, and the general state getting worse and worse.

Upon examination, there were certainly suggestive headaches, gastric distress, and slight eye changes. The headaches were the chief symptoms. They were of a bursting character, largely confined to the right parieto-frontal regions, and every now and then became of an unbearable character, finally wearing themselves out with cardiac collapse; on the whole, in fact, more likely to be cerebral than otherwise. As for the stomach, there was extreme distaste for food of all sorts, but seldom absolute vomiting. In the eyes, the vessels were unusually large, numerous, and tortuous, the right is recorded as appearing "like incipient

neuritis," in fact, nothing definite, but altogether suggestive of pressure upon the ophthalmic or associated veins. Going deeper into the case, the possibility of a localised tumour was strengthened. Certain right ear phenomena were present, *e.g.*, indescribable noises almost constantly in the right ear, with throbbings in the right jugular vein, and pains in the right side of the neck. Hearing, however, was the same in both ears; there were no paralysis or spasms, but the memory was affected. As regards the uterus, catamenia had been established after ceasing to suckle the child; there had been some anteflexion which had been relieved, and latterly, years after the headaches, &c., painful menorrhagia had appeared. I was informed that there was no displacement, and no noticeable abnormality in structure, though Dr. Pinnock and others had repeatedly examined her. The question thus was:—What was the lesion upon which these symptoms depended? The case was undoubtedly obscure. Against the cause being peripheral, there was the absence of any noticeable disease, and the markedly unilateral character of the symptoms. In favour of its being central, was the fact that some source of pressure on the bone in the right temporo-sphenoidal region would account for some such symptoms as those described. From the history, an abscess there was possible. Upon this point, the writer of the article "Pyæmia" in "Quain's Dictionary of Medicine," says:—"The brain, though less frequently the seat of pyæmic abscess than many of the organs, may be the sole organ affected by the secondary lesions, and it not uncommonly happens when this is so, that the general symptoms are slight. Such an abscess may run a very chronic course, and is then found enclosed in a cyst of connective tissue." The diagnosis given, therefore, was (?) abscess in the right temporo-sphenoidal region.

The subsequent history, however, is as follows:—Three months later, a leading Melbourne surgeon performed an Emmet's operation, with absolutely no improvement in the symptoms. Four months later, Dr. Pinnock found an enlargement of the left ovary, and his diagnosis having been confirmed by Dr. Gardner, of Adelaide, he removed the ovary and tube. The former was enlarged, half fibroid, half soft and friable; the latter in a condition of well-marked hæmato-salpinx. She made a good recovery, and for the past nine months has been able to travel from place to place, and, though occasionally subject to sick headaches, the old pain and other symptoms have quite gone.

The interest of this case lies in the slow onset of ovarian and tubal disease following retained placenta and septic infection, and the localisation of brain symptoms from peripheral irritation to the extent of strongly favouring the idea of some obscure cerebral lesion. There was a family history of liability to migraine, and patient herself had always been subject to periodic attacks. To this, probably, was due the localisation of her cerebral symptoms.

Dr. HENRY pointed out the importance in cases where the symptoms suggested organic disease of the brain, but were not conclusive, of examining carefully for peripheral irritation, and especially in women, for ovarian mischief. He should like to know if there had been any difficulty in diagnosing the exact condition of the ovaries and appendages.

Dr. LE FEVRE congratulated Dr. Springthorpe on the excellence of his paper. He was of opinion that disease of the ovaries and Fallopian tubes was much commoner in Australia than in Europe, and he should like some statistics to be brought forward.

The PRESIDENT congratulated Dr. Springthorpe on the two cases he had brought before the Society.

In reply, Dr. SPRINGTHORPE stated that he had accepted the evidence of repeated examinations by competent medical men as conclusive against the existence of uterine disease. He was unaware how Dr. Pinnock came to diagnose hæmato-salpinx. No doubt Dr. Pinnock could explain. As to the undue prevalence of ovarian and uterine disease in the colonies, accurate statistics were not forthcoming, but such condition was probable, and, in his opinion, explicable, thus:—A predominance of the neurotic temperament characterised the community, partly from inheritance, partly from the conditions of existence here, hence the possibility of ovarian and uterine pains and bother. Upon this substratum we were grafting a distinctly hepatic tendency, which meant, amongst other things, pelvic congestions and continued local irritation. The product of these two factors would certainly be much ovarian and uterine disease. In his opinion, the treatment of these cases was far too commonly local, and confined to operative measures. Lastly, the number of abortions and miscarriages might account for much subsequent disease.

NOTES ON A CASE OF TRANCE, OCCURRING IN A SCHOOLBOY.

By M. BARCLAY THOMSON, M.B.

Physician to the Alfred Hospital.

[A paper read before the Victorian Branch of the British Medical Association on Wednesday, February 27th, 1889.]

About 12 o'clock one night I was called to see a patient, said to have a fit. The history of the attack was that the patient, a boy *æt.* 15, reading in his study at school, had fallen asleep over "*Allan Quatermain*," Haggard's well-known novel. While asleep his study gas was turned off, and on his awakening he made his way to his dormitory, undressed, put on his night shirt, and sat down on the head of his bed, where he was shortly after found by some of the boys returning from a party. They began to chaff him, but he made no sign of response, so they desisted, half frightened at his fixed attitude and staring look. Presently, he got up and rushed to the door, and tried to get out, thereupon the other boys attempted to stop him; he struggled furiously, but at last they overpowered him, and put him to bed. During his struggles he kept crying out, "I must get there." Immediately afterwards he foamed at the mouth, but did not bite his tongue, nor become convulsed, nor did his face change colour, remaining flushed all through. Shortly after this I saw him. He was a well-grown lad, of a strumous type; fair, with a fine skin; pale, somewhat heavy, features, long eyelashes and thick hair. He lay unconscious apparently, giving no answer when spoken to; took no notice of a severe pinch or a pin thrust into the skin. The eyelids were half closed; pupils somewhat dilated, contracting to light readily, but no blinking occurred on darting the hand or a lighted match at the eyes. All the muscles were limp; all the reflexes were absent. Pulse about 70; respiration easy; temperature 98.6°. He was rather a lazy boy, but clever, and had not been working hard. There was no evidence of masturbation. He passed a quiet night, seeming to sleep naturally. Next morning he was in much the same state.

He drank freely of milk, passed water, and the bowels acted naturally. He would now answer after a question had been repeated several times, but the answer was not always intelligent, and he was inclined to ramble incoherently, occasionally singing and whistling. He declared he was blind, but on getting out of bed he always made straight for the door, and never knocked against anything. I felt sure he knew, before I spoke, when

I was in the room, and the headmaster felt the same. The ophthalmoscope showed nothing abnormal.

I thought the case was one of a functional nature that could not be classed, except under the vague term hysterical trance.

The appearance of the boy when I first saw him was that of one hypnotised, but there was an absence of the muscular reflex irritability and obedient automatism of the hypnotic state. He remained for the next five days in much the same state. There was a tendency to constipation, but not greater than was naturally the result of the diet and want of exercise. He did not recognise his mother on her visit to him on the 5th July, although he had expressed a wish to see her the day after his attack. On this day he was seen in consultation by Dr. Springthorpe and the family physician, Dr. Caffyn. We learnt then that the father had died suddenly after some weeks' illness with head symptoms, and that the family was a very tubercular one.

I still adhered to my original diagnosis of a functional disorder, and felt this was borne out by the absence of any positive sign of disease, and the unusual clinical features the case presented. The absence of fever, the free mobility of pupils, the quiet pulse, the absence of cervical muscular fixation, excluded any meningeal affection to my mind.

Dr. SPRINGTHORPE agreed with me to some extent, but thought there was probably an organic condition, and that the case might go on to acute dementia, with softening.

Dr. CAFFYN was so impressed with the tubercular history that he inclined to the view that this was the active agent.

There was only one point that told against my opinion, and that was, that the nurse was sure that the boy was gradually getting weaker, and on our getting him out of bed between two nurses, he had to be almost carried, with his arms limply hanging round their necks, and his feet dragging along the ground. I felt sure, however, that a great deal of the prostration was psychical.

We decided to abstain from any violent mode of treatment, and ordered some iodide of potash to be rubbed into the skin. My treatment had been mainly mental. Three days after, *i.e.*, on the eighth day after the attack, at my morning visit, I could see at once he was coming round, the facial expression had more intelligence, and the whole boy looked braced up. I asked him

if he would not like to see his mother, and on his saying "Yes!" I said, "well turn to her there, she has been sitting at your bedside for three days." He did so, and put his arms out to her. I then asked him if he could see, and he said, "No!" but on pressure he pointed out the fire-place, and then a bottle therein. Bringing the bottle over, I asked him if he could read the name on it, and slowly he said, "P R T;" but I said, "you have omitted a letter," pointing to the O. He said, "that is nothing;" whereupon I laughed, and said "he deserved a drink," and as he preferred sherry and lemonade, had some brought, when he sat up and drank a whole tumbler right off.

During this time he had a shame-faced expression, and gave way very slowly, but at length laughed naturally and spoke rationally. He said he had no recollection of anything after finishing his novel a week before. From this day he never had any symptoms, except a complaint of want of sight. Some days after he was seen, and his eyes were examined, by Dr. Maudsley, who found nothing abnormal. He has since enjoyed very good health.

Looking back at the case, there is no doubt it was a functional disorder, induced by the shock of waking in the dark after reading a more than ordinarily exciting novel.

During my late student days at Edinburgh, I worked with several fellow students at hypnotism, trying it in many different cases, and this boy's appearance, as I have already said, at first was that of one hypnotised. As the hypnotic state can be induced by fixing the attention either through the eye, ear, or skin, I have often wondered if fixing the mind on one idea could not induce the same state, and this boy's case seems to me to bear the interpretation that a strong mental impression can induce a variety of the hypnotic sleep. To my mind, many of the cases of religious ecstasy in the middle ages were forms of hypnotism, induced by fixing the mind too much on religion.

Since writing the notes of this case I have read Dr. Gower's article on Trance in "Quain's Dictionary," and find that he says:—"The state now designated hypnotism is really induced trance, and trance has been accurately termed 'spontaneous hypnotism.'"

Australian Medical Journal.

MAY 15TH, 1889.

HOSPITAL EXTENSION.

The meeting at the Town Hall to consider the question of providing increased hospital accommodation, can hardly be said to have been a brilliant success. The attendance was only fair, and included but few wealthy or really representative men, while the somewhat fervid oratory and attempt at theatrical effect did not evoke much in the way of large donations. In fact, the public seems somewhat suspicious of the movement, or perhaps rather of its originators, and the vagueness of its form. People would like to know a little more definitely what is likely to be done with the money that is collected. There is a large number of charitably disposed people who would give freely to a project for the removal of the Melbourne Hospital from its present site, and the building on another site of a new Melbourne Hospital, provided with the most approved modern appliances. As before pointed out in the *Journal*, the proceeds of the sale of the present site would very nearly suffice to pay for the new hospital, which need not be such a huge and costly structure as some seem to imagine. Several speakers at the Town Hall insisted that hospitals exist solely for the relief of the indigent sick, but we contend that while this may have originally been the primary object, it is not so now, or if it be the sole object, that very little accommodation ought to suffice in this colony. When the rate of wages, the prices of the necessaries of life, and the small amount of the subscription to most of the numerous benefit societies are considered, it is evident that there ought to be very few indeed who need free hospital accommodation and free medical attendance, and from this point of view, there can be little doubt that the existing hospitals are largely abused. On the other hand, a large hospital, where every variety of disease can be observed and investigated, is a necessity in teaching the practice of medicine and surgery in all its branches. Trite as this may

seem to professional readers, it is none the less a hard saying to many of the laity who cannot be made to see its force. The great need in Melbourne at the present time seems to be some sort of central organization that should regulate and control all the existing charitable institutions, so that they might be worked in harmony and inter-dependently. In connection with this a proper ambulance system is most urgently required, not only for conveying the sick to the hospitals, and from one hospital to another, but for conveying persons accidentally injured to their own homes. At present, if a man meets with an accident in the street, he is almost invariably hustled into a cab, and jolted up to a hospital, no matter whether he wishes to go there or not.

Such a central organization as suggested would be able to see what present institutions could be extended, and what new ones are required. The Alfred and Austin Hospitals could no doubt be readily enlarged; the present Melbourne Hospital cannot be suitably extended, is out of date, and a new fairly central general hospital should be erected for clinical purposes with the proceeds from the sale of its site. A fever hospital is required, not for paupers, but for all cases of contagious fevers, so that all patients suffering from typhoid, scarlatina, diphtheria, measles, &c., may be properly isolated and disinfected. This institution should be of an elastic character, consisting of tents or wooden tenements; several, in fact, might be erected by adjoining municipalities, and the patients charged the exact expenditure incurred for rent, nursing, food, drugs, &c., and be attended by their own medical men. It may be suggested also that the various Friendly Societies might well unite in erecting a hospital to which their members could be taken when requiring careful nursing or surgical operations.

THE AMENDING MEDICAL BILL.

This Bill, which was referred by the Medical Society of Victoria and the Victorian Branch of the British Medical Association to their committees for amendment, has been finally dealt with, and appears now in its complete form.

The committees of the two Societies have entrusted its introduction into Parliament and future conduct to a sub-committee, consisting of the President of the Medical Society of Victoria (Dr. Balls-Headley), the Secretary (Dr. Barrett), the President of the Victorian Branch of the British Medical Association (Dr. Fishbourne), the Secretary (Dr. Maudsley), together with Dr. Neild and Dr. Springthorpe.

Whereas it is expedient that persons requiring medical aid should be enabled to distinguish qualified practitioners from persons practising illegally be it therefore enacted by the Queen's Most Excellent Majesty by and with the advice and consent of the Legislative Council and Legislative Assembly of Victoria in the present Parliament assembled and by the authority of the same as follows—

1. This Act shall come into operation on the first day of _____ in the year of our Lord one thousand eight hundred _____ and _____ and may for all purposes be cited as the "Medical Act 18 ____." It is divided into the following parts that is to say—

Part I.—Medical Council of Victoria.

Part II.—Legally qualified Medical Practitioners.

Part III.—Medical Witnesses.*

Part IV.—Schools of Anatomy.*

2. The Act of Parliament of Victoria No. CCLXII. intituled "An Act to consolidate the laws relating to Medical Practitioners" shall be and the same is hereby repealed.

3. Nothing contained in this Act shall except as is hereinafter specially mentioned in regard to those persons whose names shall be at any time erased from the Medical Register under the provisions of this Act affect any act or thing lawfully done or any right or privilege acquired or any certificate or license granted or any nomination or registration made under the before-mentioned Act No. 262 or under any of the Acts thereby repealed before the coming into operation of this Act and all offences committed and penalties incurred and proceedings commenced against or under any of the said Acts before the coming into operation of this Act shall be prosecuted enforced and continued respectively as if this Act had not been passed.

* It is proposed to re-enact without alteration Parts III. and IV. of the Medical Practitioners Statute 1865, relating respectively to "Medical Witnesses" and to "Schools of Anatomy."

PART I.—MEDICAL COUNCIL OF VICTORIA.

4. A Council which shall be styled "The Medical Council of Victoria" and hereinafter called the Council shall be established and shall consist of a number of persons not exceeding ten who shall be chosen from time to time in the manner hereinafter mentioned by those medical practitioners whose names and qualifications shall at the time of the passing of this Act appear on the Medical Register of Victoria as duly registered medical practitioners and of four persons to be nominated by the Governor in Council and of one person to be nominated by the Senate of the University of Melbourne.

5. No person shall be eligible as a member of the Medical Council of Victoria who is not registered under this Act or the Acts hereby repealed.

6. The names of those persons who may be appointed by the Governor in Council and by the Senate of the University of Melbourne as hereinbefore mentioned members of the Council shall within thirty days of the coming into operation of this Act be published in the *Government Gazette* and on the publication of such names the Medical Board of Victoria shall cause a notice to be published in the *Government Gazette* and in some newspaper or newspapers circulating within the colony that the election of the remaining ten members will be held on a certain day to be named in such notice which day shall not be later than sixty days after the coming into operation of this Act and such notice shall require that all persons desirous of becoming candidates for the office of member of the Council shall forward a notification by post addressed to the President of the Medical Board within one week from the date of such notice stating that such persons are desirous of becoming candidates for the office of members of the Council.

7. In the event of not more than ten persons forwarding a notification as before mentioned to the President of the Medical Board within the period mentioned the persons whose names shall have been so forwarded shall be declared to be duly elected members of the Council and the names of such persons shall be forwarded by the President of the Medical Board to the Governor in Council for publication in the *Government Gazette* with the notice as hereinafter mentioned fixing the time of the first meeting of the Council.

8. If more than ten persons shall be desirous of becoming candidates for membership of the Council and shall forward their names as hereinbefore mentioned to the President of the said Board the President of the said Board shall cause such names to be forthwith printed on papers hereinafter called voting papers and shall cause one of such papers to be forwarded to every medical practitioner whose name shall be duly registered in the Medical Register of the Medical Board at the coming into operation of this Act. Any such practitioner desirous of voting for the election of members of the Council shall erase from his voting paper the name or names of those persons for whom he does not desire to vote and shall legibly sign such voting paper in the presence of a Justice of the Peace or the Registrar of Births Deaths and Marriages of the district who shall endorse it and it shall then be forwarded to the President of the Medical Board with the words "Election of Medical Council of Victoria" written on the envelope or paper enclosing the same within fifty days after the coming into operation of this Act.

9. A special meeting of the Medical Board shall be held as soon as practicable after the expiration of the fifty days last mentioned at which the voting papers which shall have been addressed to the President of the said Board shall be opened and the several votes as therein given shall be counted by the Medical Board. The ten candidates who have received the largest number of votes shall then and there be declared duly elected members of the Council. The President of the Board shall forward such names to the Governor in Council for publication in the *Government Gazette* with the notification fixing the time of the first meeting of the Council.

10. If any two or more candidates shall be found to have received the same number of votes the Medical Board at the special meeting before mentioned shall decide by vote which candidate is to be declared elected and such candidate shall be duly elected member of the Council.

11. If any voting paper shall have remaining thereon unerased the names of more than ten candidates the vote given on and by such voting paper shall be void and of no effect.

12. If any voting paper shall be in any respect so defaced or destroyed or so written as to render it doubtful for which candidates the person signing such voting paper intended to vote

the vote given on and by such voting paper shall be void and of no effect.

13. If any voting paper shall not be signed by the medical practitioner forwarding the same and attested as aforesaid the vote given on or by such paper shall be void and of no effect.

14. Any duties which by the preceding sections of this Act are imposed on the Medical Board of Victoria or on the President thereof in regard to the election of members of the first Council to be elected under this Act may and shall in regard to the election of members of any future Council to be chosen and nominated under this Act be fulfilled and discharged by the Council at the time in existence and by the President thereof respectively.

15. The members of the Council shall be chosen and nominated for a term not exceeding five years and shall be capable of re-appointment and any member may at any time resign his appointment by letter addressed to the President of the said Council and upon the death or resignation of any member of the said Council some other person shall be constituted a member of the said Council in his place in manner hereinafter provided but it shall be lawful for the Council during such vacancy to exercise the powers hereinafter mentioned. In case of the death or resignation of any member of the said Council some other person shall be appointed for the unexpired portion of his term of office by the body of which he was the representative in the manner hereinbefore specified. Three months prior to the expiry of its term of office the Council shall take such steps as may be necessary to secure the appointment of its successor and the members of the Council shall hold office and transact business until their successors are appointed.

16. The Council shall hold their first meeting at the time fixed by notice in the *Government Gazette* in such place and at such time as the Governor-in-Council may appoint by notification in the *Government Gazette* and at such meeting the first business to be transacted by the Council shall be the election by the members present of one of the members of the Council as President thereof and such member shall continue to be President of the Council during the term for which the Council shall be chosen and nominated and the Council shall make such rules and regulations as to the times and places of the meetings of the Council and the

mode of summoning the same as to them shall seem expedient which rules and regulations shall remain in force until altered at any subsequent meeting and in the absence of any rule or regulation as to the summoning a meeting of the Council it shall be lawful for the President to summon a meeting at such time and place as to him shall seem expedient by letter addressed to each member and at every meeting in the absence of the President some other member to be chosen from and by the members present shall act as President.

17. All acts of the Council shall be decided by the votes of the majority of the members present at any meeting the whole number present not being less than five and at all such meetings the President for the time being shall in addition to his vote as a member of the Council have a casting vote in case of an equality of votes.

18. The Medical Board of Victoria constituted under the provisions of the Act of the Parliament of Victoria No. 262 shall notwithstanding anything hereinbefore contained continue in existence for the purpose of arranging and deciding on the election of the members to be chosen for the first Medical Council to be chosen and nominated under this Act until the first meeting of the said Council upon which the said Medical Board shall cease to exist.

19. The Council shall subject to the approval of the Governor-in-Council appoint a Registrar who shall be paid such salary as the Council with the approval of the Governor-in-Council may direct.

20. It shall be the duty of the Registrar to keep in accordance with the provisions of this Act and of any order or regulations of the Council a book hereinafter called the Medical Register in which he shall enter from time to time the names addresses and qualifications of medical practitioners registered by the Council. And the Registrar from time to time as directed by the Council shall erase from the Medical Register the names addresses and qualifications of all registered practitioners who shall have died and shall from time to time make the necessary alterations in the addresses or qualifications of persons registered under this Act. And to enable the Registrar to fulfil the duties imposed on him by this Act it shall be lawful for him from time to time when directed by the Council to write a letter to any registered

person addressed to such person according to his last known address inquiring whether such person has ceased to practise or changed his residence and if no answer shall be returned to such letter within the period of twelve months from the sending thereof it shall be lawful for the Registrar by direction of the Council to erase the name address and qualification of such person from the Medical Register provided always that the same may be restored to the Register his qualification remaining the same by order of the Council on such person applying to the Council to have his name restored and paying such fee as is hereinafter mentioned as the fee to be charged for re-registration.

21. Every deputy Registrar of Births and Deaths in Victoria on receiving notice of the death of any medical practitioner shall forthwith transmit notice of such death to the Registrar of the Council and on receipt of any such notice or of information otherwise duly authenticated of the death of any registered medical practitioner the Registrar may by direction of the Council erase the name of such deceased practitioner from the Medical Register.

22. Any registered practitioner who shall change his place of residence shall forthwith report such change to the Medical Registrar.

23. Any University College or Body granting medical and surgical qualifications now existing or hereafter constituted in the colony of Victoria shall from time to time when required by the Council furnish such Council with such information as it may require as to the courses of study and examination and the ages at which such courses of study may be commenced and at which such qualifications may be conferred and generally as to the requisites for obtaining such qualifications and any member or members of the Council or any person or persons deputed for this purpose by such Council may attend and be present at any such examination.

24. The Medical Council of Victoria shall publish in the *Government Gazette* once every year a list of the names of those Universities Colleges and Bodies granting medical and surgical qualifications together with certain qualifications comprised in Schedule II. to be called the recognised Universities Colleges and Bodies whose qualifications may be registered by the Medical Council of Victoria. And it shall be lawful for the said Council at any time

if it see fit to add the names of other Universities Colleges or Bodies with efficient qualifications to those whose qualifications may be so registered or to remove from the list the names and to refuse to register the qualifications of any Universities Colleges or Bodies whose qualifications or course of study or examination of students shall in the opinion of the said Council have become insufficient to secure a proper amount of skill and knowledge.

PART II.—LEGALLY QUALIFIED MEDICAL PRACTITIONERS.

25. All persons whose names addresses and qualifications shall at the coming into operation of this Act appear as duly registered in the Register kept by the Medical Board of Victoria under the provisions of the Act No. 262 shall be deemed to be without any further registration duly registered under this Act.

26. In addition to the names of those persons registered by the Medical Board of Victoria as mentioned in the last preceding section the Council shall from time to time cause the names addresses and qualifications of persons certified by the Council to be legally qualified medical practitioners within the meaning of this part of the Act to be entered by the Registrar in the Medical Register which Register shall be kept in the form in the 1st Schedule to this Act or as nearly as conveniently may be in accordance therewith and copies of such Medical Register shall in the month of January in each year be published in the *Government Gazette* and shall be published and sold by the Council. The Council shall also from time to time cause to be published in the *Government Gazette* the names addresses and qualifications of any practitioners who shall be registered by the Council at any time between the periods of the publication in the *Government Gazette* of the annual Register before mentioned and copies of any such published Register or of any such notification in the *Government Gazette* shall be evidence in all Courts of Law and before all justices and others that the persons therein specified are registered in accordance with the provisions of this Act.

27. Every person possessing or hereafter becoming possessed of any qualification described in the 2nd Schedule to this Act who shall prove on personal attendance to the satisfaction of the Council that the degree diploma testimonium license certificate or other document testifying to such qualification was obtained by him after due personal examination from some University College or Body which was at the time of granting such degree

diploma testimonium license certificate or other document duly recognised for such purpose in the country to which the same may belong shall upon payment to the Registrar of a fee of five guineas be entitled to registration as a legally qualified medical practitioner and shall receive from the Council a certificate of registration.

28. If any person whose name shall have been at any time erased from the Medical Register of the colony either by the Medical Board of Victoria or by the Council in consequence of the neglect of such person to reply to any inquiry addressed to him by such Board or Council respecting his having changed his residence or having ceased to practise shall apply to the Council to have his name restored to the Register the Council may restore such person's name and qualifications to the Register on the payment by such person to the Registrar of a fee of one guinea.

29. The Council may question any person who may attend before the Council as hereinbefore mentioned and any witness who may be produced before the Council and may take a solemn declaration from such person or witness and if any person shall wilfully knowingly and corruptly make any false statement upon such examination or in such declaration or shall utter or attempt to utter or put off as true before the Council any false forged or counterfeit degree diploma testimonium license certificate or other document or shall wilfully procure or attempt to procure himself to be registered under this part of this Act by making or producing or causing to be made or produced any false or fraudulent representation or declaration either orally or in writing every such person so offending and every person aiding and assisting him therein shall be deemed guilty of a misdemeanour and shall on conviction thereof be sentenced to be imprisoned for any term not exceeding three years.

30. If any person fraudulently or by false representations obtain a certificate as a legally qualified medical practitioner under the provisions of this part of this Act or shall forge alter or counterfeit any such certificate or any certificate issued by the Medical Board of Victoria under the Act 262 or under any of the Acts thereby repealed or shall utter or use any such forged altered or counterfeited certificate knowing the same to have been forged altered or counterfeited or shall falsely advertise or publish himself

as having obtained such certificate he shall be deemed guilty of a misdemeanour and being thereof duly convicted shall be liable to imprisonment with or without hard labour for any period not exceeding three years.

31. It shall not be lawful for any person unless registered under Part I. of this Act or under the Act No. 262 or under one of the Acts thereby repealed to pretend to be or to take or use the name or title of a physician bachelor or doctor of medicine licentiate in medicine bachelor or master of surgery licentiate in surgery doctor surgeon medical or general practitioner or apothecary or surgeon apothecary or accoucheur or licentiate or practitioner in midwifery oculist or aurist or any other medical or surgical name or title and every unregistered person so offending shall forfeit and pay a sum not exceeding fifty pounds to be recovered in a summary manner before any two justices by any person empowered so to recover by the Medical Council or by any other person suing for the same in any Court of Petty Sessions. Provided that any person who shall feel himself aggrieved by any such conviction or order of justices may appeal therefrom to the next Court of General Sessions of the Peace in accordance with the law for the time being in force relating to appeals from justices to Courts of General Sessions of the Peace.

32. Every medical practitioner who shall have received a certificate of registration as aforesaid shall afterwards be entitled to sue in any Court of Law within Victoria to the extent of the jurisdiction of such court for the recovery of his fees or other remuneration for his professional services whether medical or surgical and it shall be sufficient to state in the particulars of demand the word "for medical services" which shall include every demand for medical or surgical aid including medicines when supplied by the plaintiff to the defendant and no person shall be entitled to recover any charge in any court of law for any medical or surgical advice or attendance or for the performance of any operation or for any medicine which he shall have both prescribed and supplied unless he shall prove on the trial that he is registered in accordance with the provisions of Part I. of this Act or of the Act No. 262 or of some Act hereby repealed.

33. No person not registered under this Act shall hold any appointment as a physician surgeon or medical officer in passenger or other vessels chartered from any port in Victoria. No person not registered under this Act shall be appointed in Victoria to

act as physician surgeon or medical officer in passenger, or other vessels leaving any port in Victoria and no person not registered under this Act shall hold any appointment in Victoria as physician surgeon or medical officer in any hospital infirmary dispensary or lying-in hospital or in any lunatic asylum gaol penitentiary house of correction house of industry or other public institution for affording medical relief in sickness infirmity or old age or as a medical officer of health. And no certificate required by any Act now in force or that may hereafter be passed from any medical practitioner shall be valid unless the person signing the same be registered in accordance with the provisions of Part I. of this Act or the Act No. 262 or of some Act thereby repealed. Provided that nothing herein contained shall render invalid any such certificate from a duly appointed medical officer of any of Her Majesty's land or sea forces in full pay although such officer may not be registered under Part I. of this Act.

34. It shall be lawful for the Council to refuse to register any person whose name may at any time have been removed from a recognised licensing body and if the Council shall at any time have ascertained by information duly authenticated to their satisfaction that the name of any registered practitioner has in consequence of any misconduct professional or otherwise been erased from the roll or list of members of any recognised university college or body from which such practitioner shall have obtained any qualification it shall be lawful for the Council to direct the Registrar to erase such practitioner's name address and qualification or qualifications from the Register and the Registrar shall erase the same accordingly.

35. If any qualified practitioner shall after due inquiry be judged by the Medical Council to have been guilty of infamous conduct in any professional respect the Council may if it see fit direct by a unanimous vote of those present at the meeting of the Council called to consider the matter the Registrar to erase and the Registrar shall erase accordingly the name address and qualifications of such practitioner from the Medical Register.

36. Any entry in the Medical Register which shall be proved to the satisfaction of the Council to have been made in consequence of any fraudulent or incorrect representation made by or on behalf of the practitioner to whom such entry relates may be erased from the Medical Register by order of the Council.

37. On the erasure of the name of any registered practitioner under the provisions of either of the last preceding Sections notice of such erasure shall within one week of the making thereof be sent by post or otherwise to the last known address of such practitioner and notwithstanding anything in this Act hereinbefore contained any medical practitioner whose name shall be so erased shall after the expiration of a period of three calendar months from the date of such erasure cease to be a legally qualified medical practitioner and shall be liable to all or any of the penalties imposed by this Act on persons practising illegally and such person shall no longer be entitled to any of the privileges conferred by this Act on legally qualified medical practitioners and all such erasures shall be published in the *Government Gazette*.

38. It shall be the duty of the Council to report to the Council or authorities of any University College or Body which shall have granted any medical or surgical qualification to any practitioner whose name or qualifications shall be erased by the Council in virtue of the provisions of this Act the fact that such practitioner's name has been erased from the Medical Register.

39. After the coming into operation of this Act the words "legally qualified medical practitioner" or "duly qualified medical practitioner" or any words importing a person recognised by law as a medical practitioner or a member of the medical profession when used in any Act of Parliament of Victoria shall be construed to mean a person registered under this Act or under the Act No. 262 or under one of the Acts thereby repealed whose name shall not have been erased from the Medical Register under the provisions of this Act.

40. Any sum or sums of money accruing from the recovery of any penalties under this part of this Act (except in regard to any penalties recovered under the provisions of Section 31 of this part of this Act) and all moneys received by the Council or the Registrar arising from the fees to be paid on registration or from the sale of Medical Registers shall form part of a fund to defray expenses incurred by the Council under this Act.

41. Failing the taking of legal proceedings by any other person it shall be the duty of the Medical Council to institute legal proceedings against any persons infringing any of the provisions of this Act and the expenses of such proceedings shall be defrayed out of the fund hereinbefore mentioned.

SCHEDULE I.

SHOWING FORM OF CERTIFICATE OF REGISTRATION.

NAME.	RESIDENCE.	QUALIFICATION.
A. B.	Melbourne ...	Fellow of the Royal College of Physicians, London. Member of the Royal College of Surgeons, Edinburgh. Licentiate of the Society of Apothecaries, London.
C. D.	Ballarat ...	Member of the Royal College of Surgeons, London.
E. F.	Castlemaine...	Licentiate of the Faculty of Physicians and Surgeons of Glasgow.
G. H.	Geelong ...	Licentiate of the Society of Apothecaries, London.

A. B., President of Medical Council.

C. D., Member of Medical Council.

E. F., do. do.

SCHEDULE II.

DEFINITION OF QUALIFICATION.

1. Doctor Bachelor or Licentiate of Medicine, Master Bachelor or Licentiate of Surgery in any University of the United Kingdom or the Universities of Melbourne Sydney Adelaide or New Zealand.
2. Fellow Member or Licentiate of the Royal College of Physicians of London.
3. Fellow Member or Licentiate of the Royal College of Physicians of Edinburgh.
4. Fellow Member or Licentiate of the King and Queen's College of Physicians of Ireland.
5. Fellow or Member of the Royal College of Surgeons of England.

6. Fellow or Licentiate of the Royal College of Surgeons of Edinburgh.
 7. Fellow or Licentiate of the Faculty of Physicians and Surgeons of Glasgow.
 8. Fellow or Licentiate of the Royal College of Surgeons in Ireland.
 9. Licentiate of the Society of Apothecaries, London.
 10. Licentiate of the Apothecaries Hall, Dublin.
 11. Any person registered as a legally qualified medical practitioner under any Act of Parliament of the United Kingdom.
 12. Any medical officer duly appointed and confirmed of Her Majesty's Sea or Land Forces.
 13. Any person who shall on personal attendance prove to the satisfaction of the Medical Council of Victoria that he has obtained after personal and due examination a medical degree diploma testimonium license certificate or other document certifying to his ability to practise medicine or surgery from some British or Colonial University College or Body or from a foreign University College or Body as the case may be which was duly recognised for that purpose at the time of granting such degree diploma testimonium license certificate or other document and entitled him to practice medicine in the country to which such University College or Body belongs and which required before granting such degree diploma testimonium license certificate or other document that the applicant therefor should have passed through a regular course of medical study of not less than four years' duration.
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A largely attended meeting was held at Thursday Island on the 16th ult., to protest against the proposed landing of lepers on Friday Island. Resolutions were passed pledging the meeting to oppose by every means in their power the landing of lepers on any island in Torres Straits, and measures will accordingly be taken to prevent lepers landing. A vigilance committee was appointed.

Rebibo.

Dissolution and Evolution and the Science of Medicine, by C. PITFIELD MITCHELL, M.R.C.S. London : Longmans, Green and Co., 1888.

The Evolution theory has been so fruitful, when applied to the study of most branches of natural science, that any attempt to extend its application, for investigating the problems of pathology, will be gladly welcomed. Prof. Alfred Newton, about the time of Mr. Darwin's death, referring to the great benefits which had followed the publication of the "*Origin of Species*," insisted especially on the circumstance that it supplied a guide for the co-ordination of the vast mass of facts which had been accumulated by observers in all countries. The accumulation had become so enormous, he said, that without some guiding principle to aid the understanding, the human mind would soon have become incapable of grasping more than small segments of the great field of natural science. This is rapidly becoming true of medicine. For, just at the time when the interdependence of its various departments is becoming more and more recognised, and the need of a good general training insisted on, as preliminary to any safe and useful specialisation, we find the mass of fact and theory even in what were easy specialities, so great, that it is with difficulty mastered by persons of ordinary capacity and diligence. In various branches of medical science application of the evolution doctrine has been made, and notably by Dr. Hughlings Jackson in the study of nervous diseases, and the lectures of Mr. J. Bland Sutton are well known.

An attempt to do what Mr. Mitchell attempts in this work is not altogether new, therefore, though no one before him has, we believe, attempted to extend the application of the evolution doctrine to the whole field of medical science. The attempt is certainly an ambitious one, and the pity is that it has not been more successful. It is simply an endeavour to apply Mr. Herbert Spencer's generalisations to some of the known, and also some of the unascertained data of pathology, and certainly there is no lack of the peculiar Spencerian phraseology, which so easily degenerates into mere jargon. The book is made to be unnecessarily hard reading, by this constant clinging to Mr. Spencer's

modes of expression. In fact, if Mr. Mitchell's readers do not start at a more advanced stage of medical knowledge than he gives them credit for, it is doubtful if the book will ever be read by any considerable proportion of those who take it up. This, for instance, is a little too hard on all who have gone before our author: "The proclivity, handed down to us from pre-scientific times, to regard each disease as individual, is discernible almost everywhere in the scientific medicine of to-day. With primitive man, diseases were personified entities; with ourselves they are pathological entities." We rather thought that the aim of scientific medicine had for a long time been, to show that disease is merely a derangement of the ordinary and normal processes of the body, and indeed that much which was and is called disease is merely a reparative effort on the part of the structures. Mr. Mitchell's views, therefore, are not quite so original as he would have them appear to be. The book is none the less an interesting one, though it is not a little ambitious, both in scope and style.

Part I. is taken up with an application of the principles of dissolution and evolution to general disease, as in the processes of inflammation and suppuration, thrombosis and embolism, gangrene and atrophy, as illustrating the former, and resolution and repair as examples of the latter.

Part II. is made up of an endeavour to make similar application to some special diseases—Bright's disease, cirrhosis of the liver, inflammation of the lungs, locomotor ataxia, fevers, diabetes, and diseases of the mind, being the special topics.

Part III., entitled "Implications," is much shorter, and is taken up with a summary, short discussions on "heredity and disease," and "organic equilibration," rather more than six pages going to "practical deductions and conclusions." Truth to tell, the practical deductions sound rather familiar. "There appears to be no escape from the deduction that, given a knowledge of the circumstances of their genesis, a very large majority of diseases might be avoided." "A great number of those diseases, whose ætiology is yet closed to us, are undoubtedly the consequences of extremely unobtrusive habits and circumstances. Influences coming from without, and suspected only by a few observers, are, I think, the efficient instigators and maintainers of unhealthy processes that maim and destroy thousands. Chief among the, as yet unrecognised, influences, I should place those in action

upon the fundamental functions of alimentation, oxidation, and excretion."

It surely did not require any elaborate discussion, a large use of the conceptions of dissolution and evolution, or any conjuring with the Spencerian formulæ of integration and disintegration, homogeneity and heterogeneity, to arrive at such commonplaces of modern scientific medicine. With it all, the book, as we said, has its value, and may be read with advantage, if only for the summary it contains of the views presented in some of the recent text books of pathology.

J. J.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee of Management of the Melbourne Hospital, held on the 30th ult., it was reported that sixty-two persons had been refused admittance during the past fortnight, owing to the want of accommodation, forty of that number being typhoid fever patients. Dr. A. Jeffreys Wood, of Malvern, wrote, offering the Committee the use of a house in one of the suburbs, in which to accommodate patients who could not be taken into the hospital in consequence of the scarcity of beds. It was decided to thank Dr. Wood for his kind offer, but it was considered that the expense of maintaining the place would prevent the Committee from availing themselves of it. It was stated that there were 312 patients remaining in the hospital.

Mr. J. S. Butters gave notice of motion that a Sub-committee should be appointed, to strictly inquire into the position of the patients in the hospital, and as far as possible into the position of their relatives, with the view of ascertaining how far the institution was being imposed upon by persons who, by themselves or through their immediate relatives, were able to pay for or contribute towards medical aid.

ALFRED HOSPITAL.

At the meeting of the Committee held on the 12th ult., leave of absence for 12 months was granted to Dr. F. M. Harricks, who

is about to leave for Europe, Dr. Elsner to fill his post in the interval.

At the meeting of the Committee held on the 26th ult., a discussion took place on a letter from Mr. Derbin Willder, requesting that two of the Managers should attend the public meeting to be held on Monday, at the Town Hall, for procuring increased hospital accommodation for the metropolis. Very little sympathy was expressed for the proposal; Mr. J. Blyth characterising the movement as an attempt to pauperise the community. An increase of the Hospital for Incurables might be wanted in order to relieve the general hospitals of chronic cases, and a Consumptive Hospital might do good in the same direction. These works completed, there was enough room in the present hospitals. He felt sure the movement would fall to the ground. By-and-by the philanthropists would have to canvass the country for patients to fill the hospitals. A motion by Mr. Dickson, "That the President and Mr. J. Thomson be delegated to attend the meeting," was carried by the casting vote of the Chairman.

Dr. G. F. Travers was granted a fortnight's leave of absence.

Mr. W. Mackay was elected dispenser, in lieu of Mr. Bramley resigned.

THE WOMEN'S HOSPITAL.

At the meeting of the Committee held on the 3rd inst., Dr. Eugene Anderson tendered his resignation, after two years of service, as Resident Medical Officer of the institution. A vacancy having occurred in a suburban practice through the death of Dr. Doyle, Dr. Anderson had arranged to take up the practice, and desired to be relieved at once of his present duties. The resignation was accepted with regret, and under the circumstances it was decided to allow Dr. Anderson to vacate his position at the hospital forthwith. It was also unanimously resolved that a testimonial be given to Dr. Anderson.

Dr. R. H. Fetherston, jun., will occupy the position vacated by Dr. Anderson for the next three weeks as *locum tenens*, Dr. Praagst continuing to act as Resident Medical Officer of the midwifery department, and Dr. Kennedy as Assistant Resident Medical Officer.

Instructions were given to invite applications for the position of Resident Medical Officer of the infirmary department, at a salary of £200 per annum, the applications to be sent in by the 15th inst.

Dr. Hooper, Honorary Physician of the midwifery staff, having concluded another term of duty at the Hospital, reported that he was perfectly satisfied with the working of his department.

At the meeting of the Committee held on the 10th inst., Mrs. Shields, acting Honorary Secretary, read the report of the Sub-committee, which met on the 7th inst., to discuss the question of increased accommodation. The report showed that the number of persons awaiting admission to the institution was 172, many of whom would probably be able to contribute something towards their maintenance in the hospital. The present accommodation for diseases peculiar to women was manifestly inadequate for the requirements of the public, and the Sub-committee recommended that it be augmented. In view of the opinion that it was dangerous to have the infirmary department in such close proximity to the midwifery wards, it was recommended that the increased accommodation be provided elsewhere than in the grounds of the Women's Hospital, either by the erection of a separate establishment, or by the addition of special wards for women to the general hospitals. It was also recommended that a communication be forwarded to the General Committee on increased hospital accommodation, detailing these views.

The report was adopted.

Dr. J. J. Miller, late Resident Surgeon of the Eye and Ear Hospital, was appointed Honorary Assistant Surgeon *pro tem.*, to take the place of Dr. Barrett, who discharges the duties of Dr. Bowen, Honorary Surgeon, during his absence in Europe.

By the death of Mr. Johann Christian Froebel, on April 16th, the public institutions came in for a welcome addition to their funds. By his will, after some bequests to his relatives, principally living at Thürengen, in Germany, he gave £1000 to the Melbourne Hospital, £1000 to the Benevolent Asylum, and £1000 to the Alfred Hospital. If there is any residue of his estate after it shall have been realised, and all outgoings paid, the

residue is to be divided amongst all the charitable institutions which in the year of Mr. Froebel's death shall participate in the collections usually made on Hospital Sunday, and in like proportions, according to the general scheme for that year, excepting from such further benefit the Melbourne and Alfred Hospitals and the Benevolent Asylum.

INCREASED HOSPITAL ACCOMMODATION.

A public meeting was held at the Town Hall on the evening of the 29th ult., in support of the movement for providing increased hospital accommodation in Melbourne, His Excellency, the Acting-Governor, presiding. The following resolutions were carried :—

“That additional hospital accommodation is imperatively needed for the sick poor of the metropolis.”

“That the additional accommodation alluded to in the foregoing resolution take the form partly of an hospital for chronic and convalescent cases, which would immediately relieve the pressure on the existing hospital accommodation, and partly of a general hospital for not less than 500 beds, to be constructed and equipped in accordance with the latest and most scientific principles of sanitation.”

“That to secure the foregoing objects, the Government be asked to apply to Parliament for a grant of £100,000, to be supplemented by the amount to be raised by public subscription, estimated at £25,000, which will be required for fittings, furnishing, and appliances.”

“That to meet immediate wants a sum of at least £10,000 is at once required, and that, in order to raise this sum, it is the duty of every citizen to contribute according to his means; that subscription lists be opened and active canvassing commenced forthwith, and that the strongest representations be made to the Government, urging upon them the importance of the occasion, and the wisdom, as well as the necessity, of immediately promising to supplement public subscriptions by a grant of £2 for every £1 raised by subscription until the desired sum has been obtained.”

“That a general executive committee be now appointed, with power to add to their number, to constitute local sub-committees, and to take all necessary action for giving effect to the foregoing

resolutions, such committee to consist of the mayors for the time being of the cities of Melbourne, South Melbourne, Collingwood, Fitzroy, North Melbourne, Richmond, and Prahran; the towns of Brighton, Brunswick, Hawthorn, and Williamstown; the mayors of the boroughs of Footscray, Kew, Northcote, Port Melbourne, St. Kilda, Essendon; the presidents of the shires of Braybrook, Caulfield, Coburg, Malvern, and Oakleigh; the president of the Chamber of Commerce, the president of the Chamber of Manufactures, the presidents of each of the metropolitan hospitals, the members of the hon. medical staffs of the metropolitan hospitals, the president of the Trades Hall Council, the heads of the various religious denominations, the presidents of the various charitable institutions, the president of the Employers' Union, Mr. J. R. Godfrey, Mr. J. S. Butters, M.L.C., Dr. Bevan, Mr. R. L. J. Ellery, Mr. E. G. Fitzgibbon, Mr. Frank Stuart, M.L.A., Mr. E. L. Zox, M.L.A., Captain F. C. Rowan, Mr. C. H. Grondona, Mr. Derbin Willder, Mr. F. Illingworth, and the movers and seconders of the various resolutions."

"That the Right Worshipful the Mayor of Melbourne for the time being be the chairman; the present Mayor, Alderman Benjamin Benjamin, J.P., the honorary treasurer; and Mr. Derbin Willder, J.P., the honorary secretary, of such general executive committee."

HOSPITAL ACCOMMODATION IN SYDNEY.

A comprehensive scheme for the improvement of the hospital accommodation in the metropolitan district was submitted to the Premier on the 2nd inst. by the directors of the Prince Alfred Hospital, who pointed out that it was necessary to have an emergency hospital with from 100 to 150 beds, a general hospital with from 350 to 420 beds, a lock hospital with from 20 to 30 beds, a hospital for chronic and incurable cases, a hospital home for consumptives, and a convalescence hospital. They contended that special provision should also be made for fevers and infectious diseases. These suggestions included much accommodation which already existed, or was being brought into existence, but the directors urged that it was necessary that public provision should be made for the following objects:—

1. An emergency hospital.
2. The addition of two or three

pavilions to the general Prince Alfred Hospital, to accommodate typhoid and additional general cases. 3. A hospital for chronic and incurable diseases. 4. A lock hospital for women. 5. A home for consumptive patients.

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and Suburbs for March 1889, shows that the births of 1458 children, viz. 760 boys and 698 girls, were registered.

The deaths registered numbered 940, viz. 534 males and 406 females. The births thus exceeded the deaths by 518, or 55 per cent.

To every 1000 of the population of the district, the proportion of births registered was 3·48, and of deaths 2·24.

One hundred and seventy-nine deaths, or 19 per cent. of the whole, took place in public institutions.

The number of children under one year who died was 287, the total number under five years being 404.

Deaths from diarrhoeal diseases fell from 164 in January and 83 in February, to 61 in March; and deaths (chiefly of infants and young children) from atrophy, debility, and inanition fell from 182 to 118 and 110 in those months respectively. On the other hand, deaths from diphtheria increased, the numbers in the same three months being 15, 13, and 18. The following deaths were set down to typhoid fever during the first three months of 1889, and of each of the previous four years. Attention is called to the high mortality from this complaint in the present year, and especially in the month under review:—

DEATHS FROM TYPHOID FEVER IN GREATER MELBOURNE,

1885 to 1889.

		1885.	1886.	1887.	1888.	1889.
January	...	12	29	40	39	70
February	...	25	39	70	63	64
March	...	23	35	59	54	91
Total	...	60	103	169	156	225

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—Robert Wilson Hughston, Camberwell, M.B. et Ch. B. Melb. 1889; Robert Wilmot, St. Kilda, F.R.C.S. Edin. 1883, M.R.C.S. Eng. 1863, L.S.A. Lond. 1865; Thomas Cochrane Anderson, Footscray, M.B. Ch. M. Aberd. 1882; Charles Fitzmaurice Harkin, Wodonga, M.B. et Ch. B. Dubl. 1888; Eustace Julian Keogh, St. Kilda, M.B. et Ch. M. Edin. 1888; George Frederick McWilliams, Woodend, M.B. et Ch. B. Melb. 1889; Harry Massey Massey, Mount Wycheproof, M.R.C.S. Eng. 1882, L.R.C.P. Lond. 1882. Additional qualification registered:—No. 900, Henry Ray, Carlton, M.D. Glas. 1883. Name of deceased medical practitioner erased from the Register:—No. 1282, Patrick Doyle, M.D.

HEALTH OFFICER.—The following appointment has been confirmed:—Shire of Minhamite—Joseph Ross, M.D., *vice* William S. R. Woodforde, M.B.

ACTING HEALTH OFFICER.—James De Burgh Griffith, M.B., has been appointed Acting Health Officer for the port of Port Phillip, and Superintendent of the Quarantine Station, Point Nepean, during the absence on leave of John Henry Browning, M.D.

ANALYST.—The following appointment has been confirmed:—Shire of Kowree—John Kruse, *vice* Samuel Connor, M.D.

PUBLIC VACCINATORS.—The following appointments have been made:—Mount Egerton—Alexander Corry, M.D., *vice* Natale Sisca, M.D., whose resignation has been accepted; Foster—James Augustus Hayden, M.R.C.S.

ACTING MEDICAL SUPERINTENDENT.—**HOSPITALS FOR THE INSANE.**—Charles H. Hill, M.B., Melbourne, Junior Medical Officer, Hospital for the Insane, Ararat, has been appointed Acting Medical Superintendent, Hospital for the Insane, Ararat, during the absence on leave of W. Beattie Smith, F.R.C.S. Edin.

VICTORIAN MILITARY FORCES.—Surgeon Richard Herbert Joseph Fetherston, M.B., has been transferred from the Unattached List, to be Surgeon, *vice* Surgeon R. A. Stirling, M.B., resigned.

The Governor-in-Council has accepted the resignations of Mr. George Coppin and Dr. Rose, as members of the Central Board of Health.

Dr. C. J. Shields, F.R.C.S. London, has been appointed medical tutor at Trinity College, in the room of Dr. Alan Mackay, who has just obtained a medical appointment in Adelaide. Dr. Shields is an ex-student and Perry scholar of Trinity College, who, after completing his medical course in Melbourne University, and winning the medical scholarship, proceeded to England for further study, and obtained the distinction of a Fellowship in the Royal College of Surgeons. He has just returned to the colony after an absence of three years. Dr. Shields has also been appointed Demonstrator of Anatomy at the Melbourne University.

MEDICAL STUDENTS' SOCIETY.—A general meeting of the Medical Students' Society was held on Thursday evening, April 25, at the Melbourne Hospital. There were 64 members present, and Professor Allen, president of the society, occupied the chair. The report of the secretary, Dr. E. A. Mackay, was read, and, after some discussion, adopted. Reference was made to the steady

advance which the interests of the Medical School had made during the past year, and members were congratulated upon the appointments of Professor Allen to the position of chairman of the Intercolonial Rabbit Commission and of the Melbourne Sanitary Commission, of Dr. Jamieson to the lectureship in medicine, and of Dr. Balls-Headley to that of obstetrics—appointments which the committee felt would enhance the reputation and influence of the Medical School. During the year the Alfred Hospital had taken active part in teaching, and demonstrations had been regularly given. Clinical lectures had been continuously delivered at the Melbourne Hospital, and several improvements had been introduced into the curriculum of that institution. The thanks of the society were tendered to Drs. Snowball, Charles Ryan, Beaney, and Springthorpe, for the valuable prizes presented for competition in connection with work under their respective tuitions, and the sympathy of the society was expressed with Dr. Williams in his long and severe illness. The students' room at the University had been handed over to the society, a considerable sum voted towards supplementing the amount granted by the council towards furnishing it, and a library had been started in connection with the room. The number of members of the society is 142. The treasurer's report showed a credit balance of £150, the expenditure having been £183.

NEGLECT OF A MEDICAL MAN TO REPORT A TYPHOID CASE.—In the District Court on the 18th ult., Dr. P. Moloney was proceeded against by the Central Board of Health under the Health Amendment Act for not reporting a case of typhoid which came within his notice. Mr. C. A. Smyth prosecuted, and Mr. J. G. Duffy appeared for the defence. Mr. Duffy said the proceedings were taken under an act that had only very recently been passed. This act required doctors to report to the Central Board of Health every case of infectious disease that came under their notice. In the case in question no attempt was made to conceal that the patient was suffering and ultimately died from typhoid, but Dr. Moloney was not aware that it was necessary to report the matter. He claimed that, as this was the first prosecution that had taken place, the charge should be withdrawn. Mr. Smyth said that, as the doctor had, through his attorney, frankly acknowledged his error, and as the case was the first prosecution under the new act, he was instructed not to proceed further with the charge. At the same time, he hoped that the case would have the effect of impressing upon medical men their duties in such cases. The charge was therefore withdrawn.

ALLEGED CASE OF MALPRACTICE.—On the 15th ult. Dr. E. G. Figg, of Williamstown, was arrested on a charge of performing an illegal operation in the case of a widow named Mrs. Margaret Dietrich. On the 11th ult. the woman called in Dr. Davenport, of St. Kilda, and when he discovered the true state of the case he summoned Drs. Rankin and Power to a consultation. The woman was taxed with having undergone an illegal operation, and she made a statement implicating Dr. Figg. This statement was forwarded to Dr. Youl, who sent it on to the Detective office. The matter was placed in the hands of Detective-sergeant Ward and Detective Sexton, and the result of their inquiries led to the issue of a warrant for Dr. Figg's arrest, which was executed. He was brought before the City Court, and remanded till the 25th ult., bail being allowed in two sureties of £500 each and his own recognisance of £1000. Dr. Beaney and Dr. Gray were the bondsmen. The woman has since recovered, and the trial of the case before the Williamstown Police Court was commenced on the 10th inst. At the conclusion

of the evidence the Bench retired for about twenty minutes to consult. Mr. Alley, P.M., then committed the accused for trial, announcing that he did so with great regret, and in opposition to the opinion of the whole of the seven justices who sat with him. The accused was admitted to bail in the same sureties as before.

The progress report of the Sanitary Commission, dealing with the work already done, has been published. The Commission sat 39 times in Melbourne, examined 69 witnesses, and inspected 11 slaughtering houses and 66 noxious trades. The members of the Commission denounce with emphasis the sanitary arrangements of Melbourne and the suburbs, and contrast local conditions unfavourably with those prevailing in Sydney and Adelaide. Almost every watercourse or lagoon within the metropolitan area is stated to be used as a receptacle for sewage, and the liquid sewage flowing into the street channels and gutters is described as being essentially foul and dangerous to health. The Commission expresses its amazement at the extent of the pollution of soil in populous districts, owing to no provision being made for the removal of drainage by proper channels. The contamination is so great that offensive emanations are given off, which pollute the atmosphere, and threaten public health. The practice of depositing refuse on vacant allotments on which tenements are permitted to be erected is reprobated, and suburban municipalities are censured for their apathy in dealing with the question of the disposal of such garbage. The investigations conducted by the Commission forced it to the conclusion that nothing short of an underground drainage system will satisfy the requirements of Melbourne. Pending the carrying out of a scheme of deep drainage, the Commissioners recommend the municipalities to initiate interim improvements, with a view to prevent outbreaks of disease.

The Commission sat on the 30th ult., and examined Mr. G. Gordon, C.E., and Mr. W. Thwaites, C.E., as to a system of deep drainage for Melbourne and suburbs. The latter gentleman said that the water carriage system was, in his opinion, the one best adapted to the requirements of Melbourne, and it had already been adopted by the majority of large towns possessing efficient sewerage systems. He calculated that the polluted water entering the sewers would be about sixty gallons per day per head of the population. The proportion of rainfall allowed to enter the sewers should be made as small as possible, but he considered that provision would have to be made for the entrance of rainfall at the rate of 3,000 gallons per acre per day over an area of 40,157 acres, leaving the remaining rainfall to be carried away by the existing street and storm-water channels. The drainage would have to be dealt with by pumping, either wholly or in part. The drainage could all be brought to one point, and dealt with at one pumping station, or it could be dealt with partly by gravitation and partly by pumping. Mr. Thwaites's scheme would make provision for a population of 700,000, at which time the maximum quantity of sewerage to be dealt with in any one day, would be 100,000,000 gallons, but this total would be reached on an average on only eighteen days in the year. He recommended that the pumping plant should comprise eight engines having a capacity of 25,000,000 gallons each per day, and the sewage farm should be situated in the neighbourhood of Laverton. The total cost of the scheme would depend entirely on the proportion of rainfall that was allowed to enter the sewers.

BIRTHS.

DAISH.—On the 26th ult., at South Melbourne, the wife of Dr. Daish of a son.

COLQUHOUN.—On the 13th ult., at Sandhurst, the wife of Dr. A. Colquhoun, of a daughter.

HENRY.—On the 30th ult., at Brunswick, the wife of Louis Henry, M.D., of a son.

RYAN.—On the 5th inst., at Queen's Parade, Clifton Hill, the wife of Dr. T. B. Ryan, of a daughter.

RYAN.—On the 2nd inst., at Burwood Road, Hawthorn, the wife of Dr. M. J. Ryan, Kyneton, of a daughter.

MARRIAGES.

MAHER—KEENAN.—On the 30th ult., at the Church of the Sacred Heart, St. Kilda, by the Rev. W. H. Quirk, William Odello Maher, M.D., M.R.C.S. Eng., third son of T. Maher, Burwood, Sydney, to Alicia Marguerite, second daughter of the late James Keenan, C.E.

SCHLESINGER—STOKES.—On the 29th ult., at All Saints' Church, East St. Kilda, by the Rev. C. Vaughan, R. E. Schlesinger, M.B., C.M. Edin., M.R.C.S. Eng., of Wellington Street, St. Kilda, son of Richard Schlesinger, of Elleralie, Rose Bay, Sydney, to Ellen Bertha (Nellie), third daughter of W. A. Stokes, late of Geelong.

STEWART—FETHERSTON.—On the 30th ult., at St. George's Church, East St. Kilda, by the Rev. J. G. Mackie, M.A., Alexander, third son of the late Gideon Stewart, Esq., Habbies Howe, Seymour, to Eva Marion, only daughter of Gerald H. Fetherston, M.D., Kiera, Windsor.

STURDEE—MERRETT.—On the 16th ult., at Holy Trinity Church, Williamstown, by the Rev. Canon Serjeant, Alfred Hobart Sturdee, M.R.C.S. Eng., of Yarraville, son of the late Capt. F. R. Sturdee, R.N., of Southsea, Hants, to Laura Isabel (Lily) Merrett, only daughter of the late S. H. Merrett, C.E., Public Works Department, Melbourne.

TRAVERS—REID.—On the 30th ult., at All Saints' Church, East St. Kilda, by the Rev. Charles Vaughan, Dr. Geoffrey Travers, youngest son of the late James Lindsay Travers, to Ida, second daughter of R. D. Reid, Orrong Road, Armadale.

DEATH.

DOYLE.—On the 14th ult., at Hawthorn, Patrick Doyle, M.D., late of Christchurch, New Zealand. Aged 41 years.

Contributors of Papers to the *Australian Medical Journal* can have copies re-printed in pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal
JUNE 15, 1889.

Original Articles.

OPHTHALMIC NOTES.

By JAMES W. BARRETT, M.D., M.S., F.R.C.S. ENG.

Assistant Surgeon to the Victorian Eye and Ear Hospital.

(a.) AN EXTREME DEGREE OF MYOPIA.

Axial myopia of 20 D is not uncommon. From 20 to 25 D it is occasionally met with, but myopia of more than 25 D is rare.

Landolt* states that we have yet to meet with a figure greater than 25 D, resulting from excessive length of the eyeball.

The case which has come under my notice is, as far as I know, unique. A young man aged 24, bookkeeper by occupation, had worn spectacles since he was seven years old. As he was obviously very short-sighted, I paralysed his iris and ciliary muscle with homatropin and cocaine, and worked out the refraction by retinoscopy, with the following result :—

Right eye meridian nearly vertical—34 D ; meridian nearly horizontal—32 D.

Left eye vertical meridian—32 D ; horizontal meridian—29 D.

After recovery from the mydriatic, the vision was—

$$R_c - 33 D = \frac{2}{38} c - 28 D = \text{Cowell } 3.$$

$$L_c - 29 D = \frac{2}{36} c - 25 D = \text{Cowell } 2.5.$$

Cylinders caused no improvement. The retention of such vision is noteworthy. He did not get binocular vision with correcting glasses, but the punctum proximum of convergence was about 35 cm., so that he possessed about + 3 AM of convergence. There were large staphylomata in the fundus ; the choroid and sclerotic were obviously much stretched and thinned. Here and there, too, the pigment was heaped up. On the whole, however, the fundi appeared much more healthy than do the fundi of many myopes of much lower grade.

This case seems to furnish an instance of the forced and morbid evolution which occasionally results from the civilising process.

(b.) A NOTE ON THE TREATMENT OF PANNUS.

In the "Annual of the Universal Medical Sciences" for 1888, in the abstract on the treatment of trachoma, the following statement is made :—"Quaita has found corrosive sublimate almost a specific. He uses a 1 to 500 solution once daily, applied with a brush, and a 1 to 7000 solution several times a day, applied with cloths. He finds the treatment well borne, even in

* Refraction and Accommodation of the Eye, p. 517.

corneal implications. Stadirini speaks highly of this treatment by sublimate, and Luigi and Debenedetti are quite as enthusiastic."

For some time past, I had become convinced that two types of pannus are met with—(1) that in which the upper half of the cornea is affected, and which is usually caused by roughness of the upper lid; and (2) that in which the whole of the cornea is infiltrated, and in which evidence of mechanical irritation is usually wanting. The first class of case I could usually treat successfully by the ordinary methods, but the latter was often intractable. I then gave the sublimate treatment an extensive trial in the second group of cases, using it at first alone, and then in combination with the ordinary remedies. At present, I most frequently treat such cases by applying eserine from two to four times a day, touching the inner surface of the upper lid sometimes with sulphate of copper, and, in addition, thoroughly painting the inner surface of both lids with the 1 in 500 solution once daily. The presence of corneal ulcers does not in any way contra-indicate the treatment.

Speaking in general terms, the result has been much more satisfactory than that of any other treatment of pannus I have employed, and several cases which I was treating by the ordinary methods, and which were dragging on monotonously, became rapidly well on the adoption of the sublimate treatment. It appears to me at present, that the influence of the sublimate on the granulations themselves is not very marked.

THE OPERATIVE TREATMENT OF ECHINOCOCCUS CYSTS OF THE LIVER.

By J. DAVIES THOMAS, M.D. Lond., F.R.C.S. Eng.

Continued.

INCISION OPERATIONS PERFORMED IN TWO OR MORE STAGES; METHODS OF BEGIN, VOLKMANN AND OTHERS.

The attempt to procure adhesions between the parietes and the sac or the liver overlying the hydatid, has been made by carrying an incision cautiously down to the peritoneum, or even through that structure; the resulting wound was then plugged for a few days, until the irritation of the injury and the dressing had caused local peritonitis and adhesions. Begin followed this plan, and plugged the wound with common lint; but after the introduction of the antiseptic method, the dressing consisted of carbolised gauze, &c.—this modification is known in Germany as Volkmann's method. In another modification the surface of the sac is exposed, and is then stitched to the lips of the wound, which is packed with an antiseptic dressing.

I have collected twenty-one cases treated by one or other of these procedures, with seventeen recoveries and four deaths.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY INCISION IN TWO OR MORE STAGES—CURES.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Jarjavay. Gaz. des Hop., 1850.	F.	29	Small Hydatid of liver.	Incision down to peritoneum; plug of lint; incision on fifth day; injections of marshmallows.	Mother-cyst and daughter-cysts escaped.	Cured.
2.	Weber. New York Medical Journal, 1852.	M.	26	Liver tumour; adhesions supposed to exist before the operation.	Exploratory trocar; incision two inches long; no adhesions but the omentum covered the cyst, this was pressed aside, and a plug of lint inserted; eighteen days later, deep incision and superficial wound extended. Iodine injections.	Considerable hemorrhage from the cut liver substance; arrested by ice. The iodine injections caused severe symptoms.	Cured in about six months.
3.	Broadbent. British Med. Jour., Nov. 30, 1875.	F.	19	Apparently two cysts, one in the right, the other in the left hypochondrium.	Repeated punctures; incision down to fascia transversalis; wound plugged with carbolic lint; two days later, deep incision; drainage tube; antiseptic injections and dressings.	In some of the cyst-walls were numerous reddish crystals of rhomboidal shape; there were also numerous crystals of cholesterol.	Recovery.
4.	Volkmann 1876. Cited by Ranke and by Turo. Paris Thesis, 1881.	F.	16	Echinococcus larger than an adult's head in the liver.	Exploratory puncture; incision through the peritoneum; wound plugged with antiseptic gauze; nine days later, deep incision without anaesthesia.	Pyrexia followed the operation, until expulsion of the mother-cyst.	Cure in six weeks.
5.	Letamano. Inaug. Diss. Jena, 1877.	F.	23	Large hydatid in right hypochondrium.	Electrolysis tried unsuccessfully; incision to peritoneum; wound plugged; deep incision on sixth day; wound dilated afterwards by laminaria; injections.	Mother-cyst not removed at time of operation, hence copious suppuration.	Nearly well when she left the hospital.
6.	Trendelenburg, 1878. Cited by Madelung. Op. cit., No. 101.	F.	12	Liver.	Puncture. Volkmann's method.	Patient had mitral insufficiency, and died two years later of catarrhal pneumonia.	Cured in eight weeks.
7.	Rudolphi, 1879. Cited by Madelung. No. 108.	F.	33	Liver.	Volkmann's method.	Patient alive and well two years later.	Cure.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY INCISION IN TWO OR MORE STAGES—CURES.—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
8.	Trendelenburg, 1879. Cited by Madelung. Op. cit., No. 104.	F.	18	Probably in left lobe of liver.	Volkmann's operation in two places at once; eight days later, deep incisions, but the adhesions being found insufficient, the cyst wall was stitched to the peritoneal wound.	During the operation, some of the cyst-fluid escaped into the peritoneal cavity, causing severe urticaria and pyrexia, lasting for several days; discharged with two fistulae in three months.	Cured completely ultimately.
9.	Kuester. Cited in Virchow and Hirsch's Jahresbericht, 1880. Vol. II., p. 198.	F.	9	Liver; hydatid frmitus present.	Volkmann's method. Antiseptic dressings.	—	Cured.
10.	Jeanecke. Virchow and Hirsch. Vol. II., p. 108.	(?)	(?)	Liver; two cysts situated adjacent to each other.	Volkmann's method. Antiseptic dressings.	The deeper cyst was not operated on, but opened spontaneously a month after the first was extirpated.	Cured.
11.	Schmitz. Peteraburger Medical Wochenschrift, 1882, p. 20.	M.	12	Liver.	Volkmann's method.	The cyst came away in shreds.	Cured.
12.	Biedermann. Inaug. Diss. Jena, 1883.	F.	(?)	Right lobe of liver.	Under antiseptic precautions, incision down to peritoneum, which was partly divided; carbolic dressing; on fourth day, deep incision; antiseptic dressings and injections.	Parasite not removed at time of deep incision; decomposition of cyst contents in spite of carbolic dressings; a fistula remained for at least six months.	Cured completely in eleven months.
13.	Thierfelder and Madelung, 1884. Op. cit., No. 143.	M.	27	Liver.	Exploratory puncture; Volkmann's operation; iodoform gauze dressing; seven days later, deep incision.	Discharged with a fistula on the thirty-ninth day; fistula closed at the end of two months.	Cured.
14.	May. British Medical Journal, July 3, 1886, p. 17.	F.	Adult	Right hypochondrium.	Exploratory puncture with hypodermic needle; clear non-albuminous fluid; incision down to sac; wound plugged with iodoform gauze; sac incised seven days later; clear fluid and a good deal of blood.	Urticaria followed the small aspiration, and also the incision of the sac. "The cyst gradually abraded."	Cure in six months.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY INCISION IN TWO OR MORE STAGES—DEATHS.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Rayer and Velpeau. Cited by Magnan. Paris Thesis, 1877. Obs. 51.	F.	47	Right hypochondrium. Multiple cysts.	Exploratory puncture; incision down to peritoneum; four days later, deep incision.	Suppuration of the sac; pyrexia; no antiseptics.	Death.
2.	Susserott. Cited by Madelung. Op. cit., No. 102, 1878.	F.	29	Colossal suppurated cyst.	Repeated punctures; Volkmann's method; discharged with a fistula.	Patient very prostrate before operation; albuminuria came on and the patient died exhausted by suppuration.	Death seven months after operation.
3.	Siedel. Cited by Naisser. Op. cit., No. 917.	(?)	?	Liver.	Incision down to peritoneum; seventeen days later, deep incision; iodine injections.	Much suppuration.	Death.

This operation is decidedly inferior to that of Lindemann, which is next described, and presents no advantages as to safety.

LINDEMANN'S OPERATION.

References.

Sænger.—Zur Operativen Behandlung der Abscesse und Hydatiden der Leber.—*Berliner Klin. Wochenschrift*, 1877.

Kirchner.—Ein Beitrag zur Operation der Echinococcen der Organe der Bauchhöhle.—*Inaug. Dissert.* Berlin 1879.

Schleghtendal.—Die Lindemann's Cheeinzeitige Operation der Echinococcen der Bauchorgane.—*Archiv für Klinische Chirurgie*, 1886.

Landau.—Zur Operativen Behandlung der Echinococcen in der Bauchhöhle.—*Berl. Klin. Wochensch.*, 1880.

Lawson Tait.—Four cases of Heparotomy.—*Birmingham Medical Review*, October 1881.

Schleghtendal (*loc. cit.*) has conclusively established the claims of Lindemann to be considered the practical originator of the mode of treatment of hydatid cysts associated with his name in Germany. The first operation of this kind, at any rate of which we have clear details, was performed by Lindemann in 1871; but the earliest account of the method was not published until 1879 by Kirchner (*op. cit.*)

The history of Lindemann's first case, as related by Schleghtendal, is interesting. The patient in question had a tumour of the liver, relative to the nature of which a difference of opinion existed between Lindemann and Stromeyer. The tumour was so tense, and the abdominal wall overlying it so thin, that spontaneous rupture was imminent, and an incision was performed. The opening in the sac was attached to the parietal incision by deep stitches, and the patient recovered rapidly. Although this operation was apparently not premeditated in the form in which it was performed, yet the lesson taught by it was not lost, and in future Lindemann incised the parieties, exposed the sac, opened it, and stitched it to the abdominal wound, all under antiseptic precautions; and thus he initiated, what is without doubt, the most effective and safe form of radical treatment.

Meanwhile, and two years prior to the publication of Kirchner's work, Sænger (*loc. cit.*) published a method of operation, which differed but little from Lindemann's plan. The abdominal wall was incised down to the cyst, which was at once secured by stitches to the lips of the external wound, and then was incised. Landau's operation was practically similar. Lawson Tait, in 1881, published an account of four cases, in which virtually the method of Lindemann had been followed.

Further allusion to the history of the operation is needless, for any credit of priority must in fairness be conceded to Lindemann, of Hanover.

The Mode of Operation.

The usual procedure of antiseptic laparotomy is employed, with or without the troublesome adjunct of the steam spray. Before the peritoneum is reached all bleeding is arrested, either by forcip-pressure, or, if need be, by aseptic ligature (carbolised kangaroo tendon, catgut, or silk); the peritoneum is then carefully incised to the same extent as the rest of the parietal layers, and now usually, if the site of the operation has been well chosen, the surface of the parasite enclosed in its sac appears. Occasionally a piece of omentum, or even a loop of intestine may intervene, and in some cases (especially if the parasite be very old, or suppuration has taken place) the sac may be adherent to the parietes. When this is not the case, a loop of stout aseptic silk is passed through the sac wall on each side, parallel to the lips of the wound. In order to pass these loops through the tough sac, I have found it most convenient to employ a strong well-curved needle, set in a firm handle; the needle may be threaded either before or after having been passed through the sac.

After the passage of the needles and loops, there is usually some escape of the fluid contents of the cyst at the sites of the puncture. This is especially apt to occur in the case of living echinococci in which the fluid is at a high pressure. Great care should be taken to prevent the escape of the fluid—especially if it be purulent or foetid—into the peritoneal cavity; this can be done by drawing the sac firmly up to the parietal wound by means of the loops, and by the use of a sponge. A part of the fluid contents of the cyst may now be removed by means of a trochar, or the sac may be immediately incised. When most of the fluid has been evacuated, the lips of the cut in the sac must be carefully stitched to the corresponding ones in the parietal wound. For this purpose carbolised kangaroo tendon, or silk, or silver wire may be used; the stitches should be applied at intervals of about a quarter of an inch apart, so as to closely unite the sac to the external wound; some operators include the skin, others, such as Trendelenburg, include only the peritoneum, the muscular layers, and tendinous fasciæ. It is claimed, that by excluding the skin there is less risk of dragging on the lips of the wound during the contraction of the sac that occurs during the process of cure. It is an open question, however, whether the greater security of hold obtained by including the skin does not

compensate for the local irritation often produced by the tension upon the skin. I have seen much redness of the skin around the wound, and even the detachment of a piece of the fibrous capsule, result from this cause, but apparently without any untoward influence upon the process of cure; the irritation of the skin soon subsides after the removal of the deep stitches.

When the sac has been safely stitched, the solid and remaining fluid contents of it should be carefully, and if possible completely, removed, for it must be remembered that these are foreign bodies, and until they are completely expelled, the sac cannot close. I place great stress upon this, for the presence in a remote *cul-de-sac* of even a small shred of cyst is a cause of continued discharge. To attain this object, various forms of forceps are useful, but it is desirable that instruments for this purpose should be provided with broad fenestrated jaws, which bite in parallel planes, and so obtain a wide but gentle grasp. Much care is needed to prevent the tearing of the mother-cyst in the process of its removal. In order to remove the daughter-cysts, if any be present, and to get rid of any fragment of the mother-cyst that may remain, it is advisable to wash out the sac with sterilised water, thymol or carbolic lotion, or some other antiseptic fluid; a syringe, provided with a long tube, being inserted to the bottom of the sac.

Finally, a long and wide india-rubber drainage tube, with lateral perforations, is inserted into the wound, and the patent is turned on the side, in order to drain the cavity of the injection still left in it. It is also an excellent plan to withdraw, by means of a syringe, to the nozzle of which a long piece of india-rubber tubing is attached, the last traces of fluid from the bottom of the sac; or the interior of the cavity may be sponged dry.

Antiseptic dressings of some kind should certainly be used. I am in the habit of employing a large pad, the basis of which is a layer of picked oakum about an inch-and-a-half thick, over this is spread a layer of Hartmann's wood-wool to the depth of half an inch or so; the whole is then enclosed in a layer of alembroth or other antiseptic gauze. The pad is so placed as to provide for the natural gravitation flow of the discharge.

If the sac be thoroughly cleared out at the time of the operation, the amount of the discharge is usually small, but a daly dressing is commonly needed for the first few days. If the case proceed satisfactorily, there is no suppuration from the sac, but there is usually a little pus discharged from the lips of the wound. The stitches may be removed in five or six days.

By Lindemann's operation, unlike Simon's, suppuration of the sac is not a necessary element, but, on the contrary, an accidental and undesirable one. The normal process of cure was well seen in the case of a child, aged 8, treated in 1886 by my colleague, Dr. Verco. Lindemann's operation was performed, and for four days the progress of the case was satisfactory; on the fifth day, however, convulsions came on, with increased rapidity of pulse and respiration, and deepening loss of consciousness, and the patient died, from no evident cause discoverable during life or after death. The condition of the sac was as follows:—"The walls of the cavity had folded together over a considerable area, especially at the outer and back part, so that the opposed surfaces had come together, and here lymph had been poured out, which had united the surfaces by plastic adhesion, and had to this extent obliterated the sac."

Early union of this kind can only take place when the fibrous capsule is not rigid from degeneration; but when the opposite condition exists, the process of cure must, of necessity, be less prompt, for the walls of the cavity do not readily fall together.

When the walls of the cavity collapse, after the removal of the mother-cyst, &c., it is, in my opinion, better not to use injections during the after treatment, but when drainage by collapse of the sac and gravitation is inadequate, and pus accumulates, as when the parasite invades or starts in the pelvis, injections may be necessary. I have seen pyrexia result in such a case from no discoverable cause, except that, in spite of the use of large drainage tubes, &c., the secretions of the cavity could not freely escape.

The Results of Abdominal Sections performed on Hydatid Cysts of the Liver, according to Lindemann's Method.

I have collected 68 cases of Liver Hydatids, treated by abdominal section, immediate removal of the mother-cyst, and stitching of the sac to the parietal wound.

GENERAL RESULTS.

Deaths	.. 7 or 10.29 per cent.
Recoveries	.. 61 or 89.70 per cent.

Deaths.—In No. 6, the patient died during the operation from the sudden arrest of the circulation through the heart, by a hydatid cyst in it. In Nos. 5 and 7 there were multiple hydatids in the body.

Cures.—These amounted to the extraordinarily high proportion of nearly 90 per cent., and this fact alone establishes the claim of this operation to be regarded as by far the best method of treatment of

liver hydatids now practised, at any rate when the cyst is accessible by an abdominal incision.

Not only are the final results good, but the duration of convalescence is brief, for in 19 cases in which this point is alluded to, the period of convalescence was as follows:—

In 3 weeks	..	..	..	1 case.
In 4 weeks	..	..	..	2 cases.
In 5 weeks	..	..	..	2 cases.
In 6 weeks	..	..	..	1 case.
In 2 months	..	..	..	6 cases.
In 2½ months	..	..	..	4 cases.
In 3½ months	..	..	..	3 cases.

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Thoracic Incisions.

Cases of Hydatid Disease treated by Incisions through the Chest Walls, with or without excision of a portion of one or more ribs, belong to five distinct groups, viz:—

1. Unruptured Hydatids situated on or near the convex surface of the Liver, and therefore not accessible by abdominal incision.

2. Hydatid Cysts, usually of the right lobe of the Liver, which have ruptured into the Pleura, treated by incision and drainage of the pleural cavity.

3. Pulmonary Hydatid Cysts which may or may not have ruptured into the bronchial tract.

4. Pulmonary Hydatids which have ruptured into the Pleura.

5. Hydatids of the Pleura operated on by Incision. These are but few in number, and will not be described in this communication.

1.—Unruptured Hydatids situated at or near the Convex Surface of the Liver.

Echinococcus cysts which have originated near the upper surface of the liver, but still within that organ, usually grow in the direction of least resistance, which then happens to be upwards. They consequently invade the right chest, and often are with difficulty to be distinguished from hydatids of the base of the right lung. Cases have been recorded in which the parasite appeared to have originated between the diaphragm and the upper surface of the liver, and what is perhaps even more curious, hydatid cysts have been met with in the substance of the diaphragm itself. For example, Vital* mentions the case of an Algerian native, aged 35, who died of chronic dysentery, at whose post-mortem

* Cited by Lenoel. *Kystes Hydatiques de la Rate*, Paris Thesis, 1879. Obs. XXIX., page 68.

examination numerous hydatids were found, including one of the size of a child's head, which had developed in the substance of the diaphragm and was covered in part by the peritoneum, and in part by the pleura.

In the Pathological Museum of the University of Oxford, there is also a specimen of this kind.

Until quite recently, hydatid cysts in this locality have always been treated by puncture with a fine trochar or aspirator needle; a few however, have been dealt with by the canule-à-demeure method.

The results of the treatment of liver cysts by canule-à-demeure traversing the thorax, have not been very satisfactory, for in five such cases collected by me, there were three deaths and two recoveries.*

The main difficulties in this mode of treatment, as applied to cysts in this locality, have been to prevent the canula from slipping out of the collapsed cyst, and to ensure complete evacuation of the cyst contents.

1.—*Echinococcus Cysts of the Upper Surface of the Liver, operated on through the Chest Walls.*

The treatment by direct incision through the thoracic walls of cysts on the convex surface of the liver, is certainly one of the boldest innovations of modern surgery. As far as I have been able to discover, the first deliberate operation of this kind was performed by Israel. It was briefly alluded to in Virchow and Hirsch's *Jahresbericht* for 1879, Vol. II., page 412.

In this case, an incision was made in the axillary line, an inch of the sixth rib being removed, and the pleura was opened to a corresponding extent; the wound was then plugged with antiseptic gauze. Seven days later the diaphragm was incised, and the wound was again plugged with gauze. Finally, nine days afterwards, the sac itself was freely incised, evacuated, and drained.

An undoubted improvement upon this method is to cut immediately down to the sac, to pass a couple of loops of stout carbolised silk through it, in order that when the sac collapses by the evacuation of its fluid contents, it may not retract beyond reach. The sac being securely held by the loops, a trochar is passed into it midway between the loops, and a part of the fluid is permitted to escape in order to reduce the pressure in the sac, and so prevent any escape into the peritoneum; the sac is then freely incised, and the mother-cyst, &c., completely removed. If it is found that the opening made into the sac is not likely to freely drain the cavity, a counter-opening should be made at the time of the operation.

* See Table of Deaths in *Echinococcus Cysts of the Liver, Treated by Canule-à-demeure*. *Australian Medical Journal*, October 15, 1888. Nos. 14, 16 and 20.

The entire treatment should be carried out under strict antiseptic precautions, and here, if anywhere, the steam spray is useful, for unless adhesions happen to exist, pneumo-thorax is inevitable; however, with careful antiseptic treatment and drainage of the pleura, the results are likely to be satisfactory.

I have collected seventeen cases in which hydatid cysts of the convexity of the liver have been treated by thoracic incision, with various precautions against the infection of the pleura; there were 12 recoveries and 5 deaths. In one of the fatal cases, viz., No. 1, death was not due to operation or to the primary disease, but to hæmorrhage from an ulcer of the stomach. In a second one, No. 2, the patient was apparently moribund from pneumonia at the time of operation. In No. 4 the cause of death was obscure, the patient was apparently progressing satisfactorily until the fifth day, when she was seized with abdominal pain, supposed to be due to intestinal colic, and died in about twelve hours.

At the post-mortem examination, nothing wrong as far as the operation was concerned could be discovered; there was, however, a patch of recent peritonitis on the left lobe of the liver, and old ribbon-like bands of adhesion connected the cyst with the pelvis. It was thought that the stretching of these bands had possibly compressed the intestine, and had thus caused the colic and the fatal result.

2.—*Liver Hydatids which had previously Ruptured into the Pleura, operated on by Thoracentesis.*

This class of cases presents many points of resemblance with lung hydatids which have ruptured into the pleura. In both cases the effects will depend upon various conditions, the principal of which are:—

1. The characters and quantity of the hydatid fluid entering the pleura.
2. Whether the mother-cyst or any daughter-cysts pass into the pleura.
3. Whether, in the case of a liver cyst, bile reaches the pleural cavity, or in the case of a ruptured pulmonary hydatid, air passes in, and if so, whether bacteria are also introduced by the air directly or by putrescent fluid from the pulmonary cavity.

If only a small quantity of clear normal hydatid fluid enter the pleura, there is reason to think that temporary pyrexia and an eruption of urticaria may be the only ill effects, and that the fluid will be rapidly absorbed. If the quantity be large, absorption will not take place, but the mixture of hydatid fluid and resulting pleuritic effusion may remain serous for a considerable time, as happened in Case I, Table 8. If the fluid of the parasite be thick and opaque in conse-

quence of degeneration, or still more so, if it be purulent or fœtid, it is nearly certain that a severe form of pyothorax will be induced, which, unless promptly treated, will rapidly destroy the patient.

When pulmonary hydatids rupture into the pleura, the probability of pneumo-thorax is very great, but this is not likely to occur from the bursting of an hydatid of the liver. A case, however, has been recorded by Bristowe (Path. Soc. Trans. 1851-52), in which it was believed that offensive gas had been generated in the pleural cavity by a liver cyst which had burst into it. It is worthy of remark, however, that in this case it is stated that there was a very free communication of the dilated right hepatic duct with the cavity of the ruptured hydatid, and so it is possible that the septic condition arose by way of the duodenum and dilated duct, and did not originate *de novo* in the pleural cavity.

The rupture of an echinococcus cyst of the liver into the pleura is an accident of very great gravity to the patient, and even when operative measures are taken, the risk of death is very great, for among eight cases treated by thoracentesis, no fewer than six ended fatally; it is probable, however, that an operation performed earlier might have been successful in some of the fatal cases.

4.—*Pulmonary Echinococcus Cysts treated by the Establishment of a Free Opening into the Sac, obtained by Incisions or otherwise.*

Hydatid disease of the lungs is without doubt a very grave malady, especially when no surgical treatment is attempted for its relief.

Up to the year 1884, I had collected from various sources 208 cases which had not been operated on, or if operated on, no statement to that effect is made in the reports of the cases. The results were as follows:—

Died	113 cases.
Cured or relieved ..	71 ..
Result uncertain	24 ..

If we omit the 24 cases in which the final result was not definitely ascertained, the result stands thus:—

Deaths	61·4 per cent.
Recoveries	38·6 ..

It is evident, therefore, that the disease is a formidable one, and even if we exclude all the deaths which cannot fairly be attributed to the direct influence of the parasite in the lungs, there yet is sound reason for believing that more than half the cases of pulmonary hydatid, which are not surgically treated, die.*

* For a fuller discussion on this point, see "Hydatid Disease of the Lungs." Adelaide 1884, page 45.

The most favourable accident of the disease is rupture into the bronchial tract, for about three-fourths of these cases appear to recover, at any rate, the following were the results in 133 such cases :—

Results of Spontaneous Rupture of Pulmonary Hydatids into the Bronchial Tract.

Deaths	31 cases.
Reputed recoveries ..	80 ..
Result unknown	22 ..

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I have already alluded to the results of puncture in hydatid cysts of the lungs, but it would lead to a digression of undue length to discuss the question fully on this occasion. I shall therefore content myself with the following statements :—

1. That the puncture, especially of large lung cysts, is by no means devoid of immediate danger (see Table I. of this paper).

2. That puncture often fails to cure the disease, and that in many cases in which it seems to do so, cure is really effected by the expectoration of the mother-cyst, a process often accompanied by much danger to the patient from suffocation, hæmoptysis, and hectic.

3. That even when the sac has been completely evacuated by the parasite, the vessels on its walls have become so degenerated from the long continued suppuration as to readily rupture and cause hæmorrhage. This has proved fatal, as in cases recorded by Habershon (Guy's Hospital Reports for 1872-3), and Kidd (Path. Soc. Trans. Vol. 36). It is evident therefore, that it is desirable to reduce to its minimum the period of suppuration.

Less frequently than into the bronchial tracts, pulmonary hydatids rupture into the pleural cavity; generally speaking, such cases prove fatal unless promptly operated on.

In very rare cases rupture has been known to take place externally, or into the pericardium.

Occasionally the cyst continues to enlarge, until the long-continued impediment to respiration and the pressure effects of the parasite destroy the patient.

The probability that any case of hydatid disease, the presence of which has been ascertained during life, will undergo spontaneous cure by degeneration is virtually *nil*.

Upon the whole, I am convinced that patients suffering from moderate-sized or large pulmonary hydatids are most safely treated by free openings into the sac, and immediate removal of the parasite.

I have collected 38 cases in which this method was adopted; of these, 6 died and 32 recovered.

One of these was operated on as far back as 1812, but this and all the earlier cases were treated in this manner, in consequence of an error of diagnosis; they were generally regarded as cases of empyema, pointing on the surface.

There can be no doubt, that to Dr. Bird of Melbourne, Australian physicians are largely indebted for the conviction, that an abscess or suppurating hydatid in the lung should no more be sacred from the knife of the surgeon, than an abscess in the breast.

I am disposed to go a step further in this direction, and to operate upon any case of pulmonary hydatid in which there is proof positive of the nature of the disease and its precise locality, with one proviso, viz., that there shall be a distinct, even though limited area of dulness on some part of the chest-wall; when, on the other hand, the alteration of the percussion note is to the production of a tympanitic note, which seems to me to indicate compression of lung which still contains air, I should feel disposed to puncture with the aspiratory needle.

In the earlier deliberate radical operations upon pulmonary hydatids, the mother-cyst had ruptured, and the operations really were upon abscesses of the lung containing more or less disintegrated hydatid membrane; in such cases, adhesions generally existed between the surface of the lung over the cyst and the costal pleura, consequently, no precautions were thought necessary in order to prevent the escape of the cyst-contents into the pleural cavity. However, it was always uncertain whether adhesions were present or not, until the sac was actually opened, when if there were no adhesions, the mischief was done.

I therefore think that in all cases of this operation, the following procedure should be adopted:—An incision about three inches long should be made over the central portion of the cyst, when all the superficial tissues have been divided, and the ribs are exposed, about an inch and a half, or two inches of one rib, or if required, of two ribs are excised, the periosteum being previously stripped off by means of a suitable elevator. The pleura should not be torn, if possible, until the piece of rib has been removed, and until all bleeding has been arrested by the usual measures (it is rarely necessary to use a ligature). A small trochar should now be passed into the cyst through the pleura, and the depth at which fluid is first met with be noticed, and if at this stage the cyst cannot be found, the wound may be closed without

serious injury to the patient; this, of course, should rarely occur. The exploration being satisfactory, a strong well-curved needle, set in a strong handle, is passed through the pleura and sac-wall into the interior of the parasite, its point is then brought out so as to include a couple of inches of the wall of the sac, and unless this has previously been done, the needle is now threaded with a loop of stout aseptic silk, which is drawn through by the withdrawal of the needle, a second similar loop is passed through the sac, parallel to the first one; in this way the fibrous capsule is securely held during the next stages of the operation. It is well now to introduce a small trochar midway between the loops, in order to remove a part of the fluid contents of the sac, this lessens the risk of escape of any of the fluid into the pleural cavity, in case adhesions are absent. The sac is now to be freely incised, to at least a sufficient extent to permit two fingers of the operator to pass. The remaining fluid and solid contents of the sac are then removed as completely as possible by the use of fingers and suitable forceps. Finally, the interior of the empty cavity should be thoroughly sponged out. The wound in the sac is stitched securely to the lips of the external wound, the sutures should be of aseptic material, and stout enough not to easily cut through; for this purpose, carbolised silk, kangaroo tendon, or silver wire, are equally well adapted; a large drainage tube is inserted, and the usual antiseptic dressings are applied. As the contents of the previously ruptured lung hydatids are often already foetid, strict Listerism is neither necessary nor practicable. The employment of injections in the treatment of these cases is undesirable, in consequence of the severe cough caused by the passage of the fluid into the bronchial tubes. The results are usually excellent and immediate, for cough and expectoration cease, pyrexia disappears, and the patient rapidly gains flesh and strength.

Among the 38 cases collected, there were 32 recoveries and 8 deaths, and of 8 cases operated on by me, 7 recovered completely. In one fatal instance, the right lung was so extensively destroyed by the parasite, that recovery was hardly to be expected. It was estimated that in this case the bladder-worm had a superficies of 256 square inches, and the mother-cyst (drained as completely as possible of fluid) weighed ten ounces avoirdupois.

In two cases, the operation seems to have failed, principally because the sac was not completely emptied of membranes, and because the drainage was inadequate.

4.—*Pulmonary Hydatids which had previously ruptured into the Pleural Cavity, treated by Thoracentesis.*

The rupture of a pulmonary hydatid into the pleura is a source of very grave peril to the patient; but the gravity varies according to circumstances, especially according to the condition of the contents of the sac at the moment of rupture. If clear normal hydatid fluid is effused in moderate amount, the resulting symptoms are far less alarming than when the fluid has undergone decomposition. It is probably also of great importance whether or not the mother-cyst or any daughter-cysts present have passed into the pleura. The size of the orifice of rupture also must not only affect the extent to which the cyst contents escape into the pleura, but also must influence largely the risk of free passage of air into the pleural cavity by way of the bronchial tubes which open into the sac. It is obvious that a large opening renders more probable the entry of bacteria into the pleura through the sac, and thus septic changes in the former are more readily induced.

It would appear, that rupture may occur first into the pleura and then into a bronchial tube, or *vice versa*, or that both events may take place simultaneously. Usually, these accidents appear to occur spontaneously, but now and then, the excitement of a fit of anger, as in a case recorded by Fouquier;* or an injury to the chest from a blow with the fist, as in a case under my care; or a fall from a cab;† or the impact of the chest against the water in diving from a height, as in a case recorded by Wischer,‡ may cause the rupture.

In nearly all the recorded cases, death has resulted from rupture into the pleura, unless surgical measures have been taken to drain that cavity, and permit the remains of the parasite to escape.

I have recorded three cases, in which cure followed free incision into the pleura for the relief of this condition. In two of the cases there was foetid pyo-pneumo-thorax, in the third the gaseous contents of the pleural cavity were aseptic at the time of the operation.

Operations upon Abdominal Echinococci in which, besides the Parasite, the Fibrous Sac was removed, more or less completely.

In a few recorded cases, the fibrous capsule of the parasite has been removed. Sometimes this kind of operation has been adopted in

* Cited by Hearn. *Kystes Hydatiques du Poumon et de la Plevre*. Paris Thesis, 1875, page 131.

† St. George's Hospital Reports. Vol. IV., pages 272 and 305.

‡ Cited in Madelung. *Beiträge Mecklenburgischer Aerzte zur Lehre von der Echinococcen-Krankheit*. Stuttgart, 1885. No. 18, page 85.

consequence of an error of diagnosis, in others the procedure has been forced upon the operators by the exigences of the case.

In one case, operated on by Spiegelberg (*Archiv. fur Gynaekologie*, 1870), a woman, aged 42, had a retro-peritoneal echinococcus cyst connected with the omentum, the large and small intestine, and the right kidney, which was mistaken for an ovarian cyst; the fibrous capsule and a portion of the right kidney were removed. The patient died of collapse twenty-six hours after the operation.

In a second case, operated on by the same surgeon (Spiegelberg, *Archiv. fur Gynaek.*, 1872), a woman, aged 30, had a large abdominal hydatid of retro-peritoneal origin. This was treated by abdominal section, partial removal of the fibrous sac, and suture of the remnant of that structure to the lips of the parietal wound. After prolonged suppuration of the remains of the sac, the patient recovered.

In 1878, Knowsley Thornton (*Medical Times and Gazette*, Nov. 16, 1878, page 565), operated on a pregnant woman, aged 32, for the removal of supposed ovarian tumours, which proved to be hydatids of the omentum and pelvis. Two bunches of cysts were removed, but some were left untouched. The patient recovered.

FitzGerald (*Australian Medical Journal*, May 15, 1880, page 206), of Melbourne, in 1880, removed the fibrous capsule, together with the bladder-worm, in the case of a large abdominal hydatid connected with the omentum and liver. The tumour was regarded as an ovarian cyst. The patient recovered.

Whitcombe (*Australian Medical Journal*, October 15, 1885), performed a somewhat similar operation upon a large abdominal hydatid of retro-peritoneal origin. The patient died nine hours after the operation.

Another large abdominal hydatid, connected with the left kidney, was extirpated by Hinckeldeyn, in 1880.* The patient, a female, aged 42, died of hæmorrhage, caused by the rupture of the left renal artery in the removal of the fibrous sac.

I have assisted Dr. Way, of Adelaide, at an operation in which several hydatids, connected with the peritoneum and omentum, were successfully removed. One large growth closely simulated an ovarian cyst.

In one case, Spiegelberg† operated upon a hydatid cyst of the spleen by "extirpation." The patient died seventeen hours later.

* Cited in Madelung. *Beitrage Mecklenburgischer Aerzte zur Lehre von der Echinococcen-Krankheit*. Stuttgart, 1886, page 135.

† Cited by Mosler. *Ueber Mils-Echinococcus und seine Behandlung*. Wiesbaden, 1884, page 24.

General Summary.

It is almost impossible, at present, to accurately estimate the real value of those operations for the cure of hydatid disease, in which the mother-cyst is not removed, viz., tapping operations, the use of parasiticide injections and electrolysis, inasmuch as the apparent cure, which often follows, is frequently found to be illusory after the lapse of a short time.

As regards tapping operations, there is reason to believe that they fail to cure the patient in fully 40 per cent. of the cases in which they have been tried; indeed, it is probable that the actual proportion of failures is much greater than is represented by that number.

Taking aspiratory punctures and ordinary tapping operations together, the deaths amounted to nearly 18 per cent., but the mortality following aspiratory puncture, whether single or multiple, was only about half that of punctures with an ordinary fine trochar.

Speaking generally, the greater the number of punctures required in a given case, the smaller is the probability of the cure of the patient by tapping alone.

Simple puncture, although generally devoid of risk, has been known to cause sudden death, sometimes apparently from shock, sometimes, however, in the case of pulmonary hydatids, from suffocation by the fluid contents of the bladder-worm. The objection to puncture as the mode of treatment for internal hydatids, however, lies less in the occasional perils of the operation than in its frequent inefficacy.

Of the use of parasiticide injections into the sac, and the employment of electrolysis, it may be asserted that there is at present no evidence in favour of these methods of treatment that does not apply equally forcibly to simple puncture, and, moreover, each possesses drawbacks of its own.

The question of choice between the various forms of radical operation is, at any rate for abdominal hydatids, simple, for their mortality is widely different, as a reference to the following table will show.

Mortality of various Radical Operations.

Caustics	33.68 per cent.
Canule-à-demeure	26.66 "
Simon's method	48.00 "
Volkman's method	19.05 "
Lindemann's method (abdominal sections)	10.29 "
Do. (thoracic incisions)	29.41 "

With regard to hydatids of the liver, or of the lung, which have ruptured into the pleura, thoracentesis is the only resource which offers itself.

Unruptured echinococcus cysts of the convexity of the liver present great difficulties in their successful treatment, for thoracic incisions show a high rate of mortality.

Pulmonary Hydatids.

The risks and disadvantages of punctures in these cases have been already discussed, and the results of radical operations are so favourable that but little difficulty can occur in the choice of treatment in ordinary cases.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, JUNE 5TH, 1889.

(Hall of the Society, 8 p.m.)

Present: Dr. Balls-Headley in the chair, Drs. Adam, Bage, Barrett, Dyring, Featherstonhaugh, Hodgson, Hooper, Jamieson, Kenny, Mitchell, Moore, McGibbon, Neild, Ross, J. P. Ryan, Syme, Sparrow, Stirling, and Workman.

The minutes of the preceding meeting were read and confirmed.

The following were elected members of the Society:—

Frederick Miller Johnson, M.D., Ch. M. Edin., of Ferrar's Place, Albert Park, proposed by Dr. C. Gray, seconded by Dr. Sparrow; George Lockwood Laycock, M.B. Edin., of 77 Collins Street, proposed by Dr. Grant, and seconded by Dr. Jamieson.

Drs. Hooper and Kenny acted as scrutineers.

Two gentlemen were nominated as ordinary members, and one as an honorary member.

The following paper was then read:—

A CASE OF EXTRA-UTERINE PREGNANCY— LAPAROTOMY—RECOVERY.

By G. ROTHWELL ADAM, M.B., C.M. Edin.

Hon. Physician Women's Hospital, Melbourne.

Cases of extra-uterine pregnancy are sufficiently rare, to warrant me bringing before you to-night the following details:—

For the history and after-treatment notes, I am indebted to Dr. C. Dyring, of Coburg, to whose watchful care the successful issue is very largely due.

Mrs. T., æt. 32, married four years, with two children and no miscarriages. Always enjoyed good health. Had a mild attack of typhoid fever a few months after the birth of the first child. Has never complained of any uterine trouble.

Dr. Dyring states :—" I was called to see her on the evening of March 20th, 1889, at 6 p.m. On arrival, I found the patient in a state of collapse, urgent dyspnœa, cold extremities, lips cyanosed, face bloodless, jactitation of arms, and pulse imperceptible. No history of hæmorrhage could be elicited, with the exception that she had been 'unwell' for some two or three days. The usual restorative treatment—hot bottles round the body, alcohol, ammonia, and ether—was adopted with some success, for at 10 p.m. her pulse rose to 140, and her general appearance improved. On the morning of the 21st, as no water had been passed, a catheter was inserted, but failed to get any urine."

Dr. Adam was called in consultation, and the following additional history obtained :—

"The patient menstruated naturally about the middle of January, missed the February period, and saw nothing until three or four days before the 20th March. This was different in character from her usual menstrual flow, being scanty, shreddy, and of dark colour. On the day of attack, the patient had not been doing anything unusual, but suddenly felt sharp pain in the lower part of the abdomen, of a bearing-down character and extremely severe. Between January and March she had no morning sickness, and little or no sign of pregnancy, with the exception of the amenorrhœa. Some time prior to the attack, she had a fall, and once after lifting some heavy furniture, had felt faint, and was obliged to be assisted to bed."

The condition of the patient when I saw her was serious enough, although reaction was fairly established. She exhibited signs of a local peritonitis in the left iliac region. The tenderness was so great that little information was obtainable by palpation.

Vaginal examination :—The vagina was hot ; cervix somewhat softened, and os patulous ; vaginal roof tender. To the left of the uterus, and posteriorly, an ill-defined swelling could be felt.

The diagnosis of a tubal pregnancy rupturing into the folds of the broad ligament was made, and in this Dr. Dyring concurred. As the patient was rallying from the shock, it was decided to delay any operative interference. The subsequent course of the

case showed that, as the peritonitis subsided, a tumour could be distinguished in the left iliac region, which gradually increased in size. Her temperature although much reduced, never quite reached the normal.

I saw her again in the middle of April, and as her general health was satisfactory, with the concurrence of Dr. Dyring, I decided to operate, fearing that secondary rupture might soon take place and prove fatal.

On April 22nd, after the usual preparatory treatment, I proceeded to open the abdomen, with the assistance of Mr. G. A. Syme and Dr. Praagst. Dr. Dyring administered the anæsthetic. An incision, two and a half inches long, was made in the middle line, between the umbilicus and pubes, but this was enlarged, after the peritoneal cavity was opened, to four and a half inches, owing to the difficulty of dealing with the numerous firm adhesions. A dark coloured cyst was then exposed, intimately adherent to omentum, intestines, and peritoneum. It appeared to me as if the cyst consisted of a layer of broad ligament, which, distended by blood, and drawn upon by adhesions, had perched itself on the fundus of the uterus. Indeed, so closely adherent was it to the uterus, that for a moment I thought that we had to deal with an ordinary month's pregnant uterus, and that the diagnosis of ectopic gestation was wrong. To make certain, I introduced a hypodermic needle into the cyst, and obtained dark bloody fluid.

After freeing some adhesions to the omentum, a strong thread was passed through the cyst wall, in order to obtain full command of it. Sponges were carefully packed round to cut off the peritoneal cavity, and the cyst was then opened. A quantity of fluid escaped with considerable force. I then broke up larger masses of blood-clot with my fingers, and washed out the sac until the water returned quite clear. The placenta was felt, firmly fixed to the right side of the sac, but it was not deemed advisable to attempt to separate it for fear of hæmorrhage. No fœtus was found, although plenty of shreds of membranes bore sufficient evidence to the nature of the cyst.

The edge of the cyst was then stitched to the edge of the parietal wound, by three sutures on either side. Owing to the friable condition of the cyst wall, this was a matter of some difficulty, but by using thick carbolised silk (pedicle ligature), and inserting the sutures some distance from the margin, it was at last

satisfactorily accomplished. The toilet of the peritoneum was now completed in the usual manner, and the abdominal cavity closed by deep sutures of carbolised silk, and superficial ones of horsehair. Two medium-sized rubber drainage tubes were placed well within the cyst, and secured to the skin by sutures.

I should have preferred using a Keith's glass tube, but, unfortunately, the only one I had with me was too large. However, I determined, should the rubber tubes prove inefficient, I would again anaesthetise the patient, and substitute a suitable glass one. This, I am glad to say, proved unnecessary, for the two rubber tubes answered the purpose excellently. The wound was then freely dusted with equal parts of iodoform and boric acid, and covered with a pad of Gamgee tissue, and sublimate gauze, the abdomen being supported by strapping, in the usual manner. The patient was then placed in a bed, previously well warmed, packed round with hot bottles, and a 4-ounce enema of equal parts of beef-tea and milk with an ounce of brandy administered. The patient suffered little or nothing from the effects of the anaesthetic, and, although the operation required two hours and a quarter to complete it healthy reaction soon set in.

The after treatment consisted in leaving the patient undisturbed as much as possible. Small nutrient enemata were given at four to six hour intervals, until the second day, when small quantities of liquid nourishment were given by the mouth.

Morphia was only once used, and that on the evening of the operation, as the patient was inclined to be restless. The highest temperature recorded was 100.3° , and pulse 120, and after the second day, the temperature remained normal throughout. On the evening of the day after the operation, a bright red discharge per vaginam was observed, with rather an offensive odour. This lochia continued for a week, and then entirely ceased. The bowels were opened naturally on the fifth day.

For the first few days there was no large amount of discharge from the drainage tubes, but it gradually increased in quantity, though remaining perfectly sweet.

Some ten days after the operation a piece of placenta came away by the side of the drainage tubes. The cyst cavity rapidly closed up, so that before three weeks elapsed, all that remained was a narrow sinus about two inches long.

The sutures closing the abdominal cavity were removed on the eighth day, the wound having healed by first intention. Those

securing the cyst, as they caused no irritation, were allowed to remain for three weeks.

By the middle of the fourth week, the patient was able to sit up, and was, in fact, convalescent.

That this is an instance of a tubal pregnancy bursting into the folds of the broad ligament is, I think, undoubted. One point of interest is the early date at which primary rupture took place. Most authorities state that primary rupture of the tube occurs between the second and fourth months. In this case, according to our calculation, little more than six weeks can be set down as the pregnant period.

The second point, to which I should like to draw attention, is the time to operate. Although this case terminated happily, I am of opinion that it is unwise to delay operating. In another such case, where we have the choice of selection, I should feel inclined to operate as soon as the patient recovers from the shock induced by primary rupture. Extensive adhesions, the results of peritonitis, would be avoided, and a better prospect of being able to extirpate the sac, and thus convert it into an intra-peritoneal operation. By delay, not only is there great risk of secondary rupture, with fatal hæmorrhage or peritonitis, but the difficulties of the operation are enormously increased, and the patient exposed to all the probabilities of prolonged suppuration.

Mr. HOOPER said there were two points of interest in connection with the paper which had just been read. Firstly, what becomes of the fœtus in such cases? In two cases he had seen, the fœtus had completely disappeared. Was it possible that it could be absorbed? In the second place, it seems that there is usually no definite sign to guide in diagnosis.

Dr. J. P. RYAN said that the fœtus does get absorbed. A number of cases are on record which prove this conclusively—the placenta having been found, but no fœtus. In cases in which extra-uterine fœtation had been produced artificially, the fœtus had been seen, and had subsequently disappeared, having been absorbed.

Dr. JAMIESON said that experiments, in which very young fœtuses had been introduced into the abdominal cavity of rabbits, showed that it was not necessary to get absorption in order to effect their disappearance, since they soften, break down, and disappear.

Mr. SYME had microscopically examined portions of clot and débris which were removed, but had found nothing but blood-clot.

It was quite possible, however, that broken-down foetus was mixed with portions of clot not examined.

Dr. DYRING said that when the case was seen, the diagnosis lay between hæmatocele and extra-uterine pregnancy. As the tumour increased in size, and became more central, it soon became obvious that it was not a case of hæmatocele. He was of opinion that peritonitis was less likely to follow operations performed late than those performed early.

Dr. BALLS-HEADLEY said that the diagnosis of these cases was not usually easy; the great point was that the catamenia exhibited a longer interval than usual. If a woman had not been pregnant for a long time, then such an interval was noticed, and an abdominal tumour developed, the diagnosis is probable. The cases generally occur when there has been disease of the tubes. The disease prevents pregnancy occurring usually, and when it occurs, prevents the passage of the ovum to the uterus. Early operation is advisable. When the sac bursts there is loss of blood, faintness, and variable temperature. It often happens that the ovum closes the rent, and so prevents further hæmorrhage for the time. Consequently, operation is advisable as soon as the shock is recovered from.

Dr. ADAM, in replying, agreed with the President as to the points of diagnosis. He thought that operation should be resorted to as soon as the shock was recovered from. Peritonitis was not a contra-indication, and adhesions were much more easily managed then, than later. He did not think that the foetus is ever found in the early cases.

Dr. JAMIESON then read, for the author, the following paper:—

CASE OF BLOOD POISONING, WITH DEMONSTRATION OF MICROBES IN THE BLOOD.

By Dr. Ross, Macarthur.

On May 10th, I was called in to see Mr. G., a tanner, of this township. On examination I found swelling of the carpo-radial joint, redness in patches, temperature slightly but distinctly increased to the touch. There was also some œdema of the dorsum manus. No œdema of forearm; pain intense; joint very tender to touch; pulse was full, bounding and quick; temperature, $101\frac{1}{2}^{\circ}$; respiration hurried; skin hot and dry; urine normal, clear, without sediment. There was no headache, no thirst, no distaste

for food, nor any constitutional disturbance which could not be accounted for by the excruciating pain and loss of sleep.

The history of the case was very obscure. I learned that, on the previous day, the patient felt quite well; but at night he was suddenly seized with pain in the hand. The seizure was not preceded by any rigors or chilliness, but by some kind of faintness or giddiness which occurred several times. I was also informed that about Christmas time he suffered from a sore hand, which got better after poulticing.

Three weeks ago the ring and middle fingers of his right hand were sore, and a boil formed in the palm, which, without breaking, disappeared.

On May 7th, he got a splinter in his right thumb. He succeeded in extracting the splinter. I questioned him closely, as to whether he had been handling hides subsequent to extracting the splinter. He, however, most emphatically denied having done so. After this information, I made another careful examination of finger, thumb and arm. The wound in the thumb was healed, there was no tenderness, on pressure, round about it, neither was there any soreness or swelling of the phalangeal joints or phalangeal metacarpal joints of thumb, middle, or ring finger. There was no lymphangitis, nor lymphadenitis, nor phlebitis along the whole length of the arm.

On these facts I based my diagnosis—synovitis parenchymatosa suppurativa, of unknown origin. At the same time I kept in mind the possibility of its being acute rheumatism, although there were some features which did not agree with that diagnosis.

On my evening visit, I found the swelling slightly increased, the redness rather more universal, and the pain so intense, the patient so restless, that I found it necessary to give $\frac{1}{2}$ grs. of morphia three times during the night. During the following day his condition did not materially alter, except that he complained of pain in his hip, which he attributed to the unusual genupectoral position in which he found the most relief.

On the 12th I felt greatly alarmed, as, although I had given large doses of salicylate of soda and antipyrin, and had also bandaged the hand, suspended it, applied cold compresses and warm fomentations, there was no decrease of symptoms. The patient had had no sleep the two previous nights. There was still one joint only affected, the swelling still increasing, the redness now quite universal round the joint. The local temperature

greatly increased, the radial pulse very bounding, full and quick ; œdema of hand and fingers most marked ; fluctuation in para-articular region distinct.

I found patient bathed in sweat of a sour odour. Temperature 102°; breathing a little hurried ; urine clear, about normal quantity, no sediment. Patient restless with pain, walking about the room, or lying in genupectoral position. Appetite not diminished ; thirst not excessive ; no marked impairment of general constitution. Under these circumstances, I again inquired as to whether he had been recently handling hides, but received the same negative answer.

That day, I made for the first time microscopical examination of his blood. When examined about ten minutes after it had been taken, it showed most striking abnormalities. The red blood corpuscles were swimming on the flat sides, some single, some coherent, in groups of three or more, partly overlapping each other, and all in first stages of decomposition. The leucocytes were increased in number ; in some fields I observed as many as ten (Leitz oil immersion $\frac{1}{2}$). The blood remained fluid longer than normal ; fibrin scarce.

These observations reminded me of a series of experiments on septicæmia in rabbits, which I had occasion to witness under the late Prof. Hueter. There, I observed conglomerations of red corpuscles rolling through small blood vessels, and causing complete or incomplete stasis in the capillaries.

All these facts greatly puzzled me. I was quite unable to arrive at a correct diagnosis, being divided in opinion as to whether it was synovitis parenchymatosa, acute rheumatism, or septicæmia. I advised the patient's friends to seek the advice of an authority on the subject, but this was found to be impracticable.

On the morning of the 13th, I found the patient in bed, wet with perspiration, and complaining of pain and swelling in the right knee. I was very glad to hear this, as I felt sure my anxiety and uncertainty were now at an end. On questioning him, I learned that during the previous night the pain had left his hand to a great extent, but his knee had commenced to feel sore. There were no preceding rigors, nor feeling of chilliness, nor sensation of cold. He merely experienced a kind of faintness or giddiness during the early part of the night, as he had done on a previous occasion. He had slept soundly from 12 midnight until 4 a.m., without morphia, for the first time since his illness. The pain had

almost left his hand; the swelling had come to a standstill; the right knee was swollen, red over the condyle, tender to touch; temperature higher than the left; pulse bounding, full, quick; temperature 102°. Patient was bathed in sweat of a sour, disagreeable odour; urine about normal quantity, clear, no sediment; bowels irregular, moving after administration of pills; appetite and thirst about normal. If any change in his condition was observable, it was decidedly for the better. He felt cheerful and much refreshed by sleep. Heart and lungs were, as far as could be ascertained, normal. No other joint affected.

I had given large doses of salicyl, and patient remarked that for 15 or 20 minutes after each dose he fancied he heard music, and also saw a man standing at the bedside, who spoke to him. At another time he saw him at the foot of the bed, trying to push back the curtains. He told me he knew it was imaginary only, but he could not help it. He also complained of difficulty in swallowing the powder wrapped up in a big piece of wafer. As there were, besides these hallucinations, constant noises in the ears, deafness, inclination to vomit, and pressure at the stomach, I discontinued salicyl, and prescribed antipyrin and bicarbonate of soda.

On discussing all the symptoms in my mind, and taking into consideration the general condition of the patient, I felt myself justified in diagnosing acute rheumatism, and giving a favourable prognosis. As to the blood observation, I was only too ready to persuade myself that the changes might be due partly to lapse of time, and partly to the effects of salicyl, although I could not get any information on the point.

For one day only was I allowed to indulge in the hope of being able to restore the patient to health and family. The very next morning the patient asked me to again examine his hand, as it had troubled him during the night. On doing so, I came to the conclusion that pus was present. I made a free incision on the dorsum, from the processes styloideus ulnæ downwards. The tissue cut through was of a darkish-brown colour, and the fluid which escaped was thin, grey-looking, and mixed with gas bubbles. The patient was conscious all day; temperature 102°; pulse of the same character, not dicrotic; heart and lungs apparently normal; heavy sweats of a sour odour; appetite not decreased; other functions normal. From this day forward I made microscopical examination of his blood, with surprisingly satisfactory

results, which I will give in detail further on. The next morning I found patient unconscious ; he had been so all night. As there was great swelling of the dorsum, I made two more incisions, connecting all three by drainage. The tissue showed the same discolouration ; pus of same nature as before-mentioned ; temperature $98\frac{1}{2}^{\circ}$; pulse weaker. I will not weary you with more details, suffice it to say, that the evidences of blood-poisoning became more apparent day by day. Allow me to mention that the tongue, which had been covered, from the beginning, with a whitish coating, showed hard and dry scabs afterwards, and finally became clear and dry. There was also a thick whitish coating on the soft and hard palate, upper part of pharynx, and between teeth and gums, which was easily removed, and did not return.

Patient continued unconscious until the morning of the 18th. The delirium was of a quiet character. The temperature during all this time was between 100 and 102° ; pulse weaker still, between 100 and 110 .

On the 19th, he called my attention to his neck. I found a rash spreading from his whiskers downwards to about two inches below claviculæ. The eruption was symmetrical, and consisted of small vesicles in groups of two or three, about the size of a small pin's head, containing a clear fluid, and surrounded by a small red halo. The skin between the groups, of normal colour. The eruption was thick on the neck, and became scarcer below the claviculæ. There was none on the back of the neck. He never complained of it itching.

On the 21st, diarrhœa set in. The stools contained some fæcal matter ; in some there were small quantities of fresh blood or slime.

On the 22nd, he had rigors at night. They were very severe, shaking the bed, and lasting for a considerable time.

Next morning, I found his breathing more laboured and quicker than before. I could not examine his lungs, as he was too weak. Temperature 102° ; respiration 32 ; pulse weak, 116 to 120. There were no hæmorrhages in the skin, no decubitus, nor jaundice. There were no evidences of lymphangitis, lymphadenitis, nor phlebitis. There was no œdema above wrist or knee. The former showed abnormal mobility.

On the 23rd, another medical man was called in, who pronounced his case to be "charbon" or "anthrax," and prescribed quinine.

Exitus on the 28th, after an illness of 17 days.

Not satisfied with patient's denial of having come in contact with the hides, I made further inquiries, and learned that he had been in the tannery handling the hides on the same, or following, day after the extraction of the splinter.

One of the employes at the tannery told me that Mr. G. was in the habit of running his right thumb along under the hides to ascertain the thickness. He assured me that those were the worst lot that he had ever seen, being covered with running sores. This occurred on the 7th or 8th, and on the 9th his illness commenced. It was not until the 22nd that these facts came to my knowledge.

Throughout my researches, I used principally Leitz oil immersion $\frac{1}{13}$, ocular iii. The blood was drawn in the usual manner, and examined about 10 or 15 minutes later.

On my first examination, I was struck with the unusual appearance of the red cells. Instead of forming the familiar "rouleaux," they were running into irregular smaller or larger heaps, partly overlapping each other, the lines of contact being still discernible. All the cells were lying on their broad sides. Wherever a single one was observed, it showed the first stages of disintegration. It was crenated, the notches being rather wide. The leucocytes were distinctly increased in number, of apparently normal appearance. Sometimes as many as ten were visible in one field; fibrin was scarce.

As the disease ran its course, the red cells presented further stages of disintegration. Instead of being crenated, they were like thorn apples, the thorns not so delicate as in healthy blood. In the heaps, the lines of contact were not visible, all forming one solid mass. When the same preparation was examined again, after a while, the blood was still fluid, but had become lake or transparent, the stroma of the red cells just discernible. Later on still, there were no crenated cells nor thorn apples to be seen. They were all peculiarly soft and jelly-like, were expanded, and the concavities, shallower than normal, nearly reached the margin.

Whenever there was a current in a small channel formed by heaps of red cells, a single one would occasionally force its way through it, shaping itself to the sometimes intricate opening, and resume its former shape as soon as it emerged. The cells seemed to have lost all consistency of form.

From four days before death, the outline of cells had altogether lost its resistance. Whenever pressure was brought to bear on an accumulation of single cells, such as exercised by air entering at

different sides, the cells would form polygons, or any other shape forced upon them, but for all that, evinced a great antipathy to touching each other. I was nearly always able to discover a small space between them. At this stage, the blood quickly became lake. In some slides I have undoubtedly observed in the red cells some kind of bacterium, great pains being taken not to mistake the base of a thorn for the latter. I always found two together in close proximity. They were generally lying on the margin of the cell, their length being about half the diameter of the red cell, and their width about half their length. They were gifted with locomotion.

The leucocytes had, as I stated before, increased in number when I first made an examination of the blood. They seemed to me to be of physiological appearance, but they soon became objects of deep interest. As time wore on they became enlarged, and more and more studded with micrococci (Metschnikoff's Phagocytism). Somewhat later on, I noticed smaller cells in the enlarged leucocytes. These daughter cells, which were about the size of normal leucocytes, numbered three, eight, or more, and were full of micrococci. The outlines of the smaller cells, which consist of granular matter, were well-defined, round, and partly covering one another.

Besides these, large scaly cells were noticeable, uninuclear or multinuclear, irregular, polygonal, and also filled with micrococci. Further on I found microcytes, debris, leucocytes, and heaps of micrococci. As I previously remarked, nearer death the blood soon became lake, and so materially interfered with observation. The blood kept its fluidity for an abnormally long time, and was, throughout, remarkable for the scarcity of fibrin.

I would like it to be clearly understood, that I do not maintain that the blood was actually circulating in that stage of disintegration which I found it presented shortly after withdrawal. There was always an interval of about 15 minutes before I could examine it. In the meantime, some change may have taken place.

But I do maintain that the blood, or rather the constituents of the red discs, were in such a condition circulating as to undergo a rapid disintegration after removal, this process becoming quicker and quicker on nearing the exitus.

I do not venture to draw any further conclusions from my observations. Examining this preparation (Leitz System 7, Ocular ii., 1 to 600), you find among the green-stained red cells,

heaps of dark blue coloured micrococci, some forming zooglœa, some dumb-bells, some keeping single. They are staphylococcus pyogenes aureus. The name is derived from the typical form they present, namely, a bunch of thickly-clustered grapes. Singling out one, you will observe it is perfectly round.

Studying this (Leitz oil immersion $\frac{1}{2}$, Ocular iii., 1 to 1000), you will again find aggregation of micro-organisms amongst the red cells. You will notice part forming zooglœa, the individual members of which are not so closely attached; part lying singly, part forming dumb-bells. You will observe that they are not round, but somewhat oval, or like small rods. They seem to belong to the micro-bacterium (Cohn). I am not sure but that these two are identical. Next to the micrococci, the red-stained leucocytes will attract your attention. The well-defined red parts are the nuclei of the pus cells, the bodies of which are just visible. They are larger than ordinary pus corpuscles.

Discussing now the diagnosis of the case related, we can easily dispose of "charbon," it being out of the question. There were never any of the typical evidences of malignant pustule present, namely, central dry slough, ring of vesicles round it, raised brawny induration—the absence of bacillus anthracis is, of course, no evidence against "charbon"—but there was excruciating pain, suppuration of joints and intercellular tissue, and an extreme depression of all vital functions. Was it a case of primary suppuration of joints, caused by the convenient factor of a cold, and developing into pyæmia, or was it blood-poisoning proper? I think the history of the case points strongly to the adoption of the latter diagnosis. As to ætiology, my opinion is, that the handling of the hides was the immediate cause of septicæmia, and that the boil in his palm, about three weeks previous to that, was the primary cause of pyæmia.

The diagnosis would therefore be septo-pyæmia. I will give my reasons. By septicæmia is understood a general infection caused by some micro-organism, and characterised by a disintegration process of the blood by an extreme depression of all the vital functions, especially of the central nervous system, and without the development of secondary inflammations. It can be transferred from one animal to another by inoculation, an infinitesimal quantity being sufficient. Intervention of putrefactive process is unnecessary. By pyæmia, on the other hand, is understood a constitutional disease caused by micro-organism, and characterised by an increase

of leucocytes in the blood, and the development of secondary inflammations. A primary suppuration is not required. In the case under consideration, there is a combination of symptoms of either disease. The absence of rigors in this case, I venture to explain, is caused by some effect or other of the infection of the thermo-centre.

The special points worthy of notice in the case just related are—

1. Wherever, in supposed rheumatic fever, one joint only continues affected, it must arouse suspicion as to the real nature of the disease.

2. Whenever in such suspected cases the usually reliable drugs fail, a close observation will probably reveal the correct disorder.

3. No absolute reliance can be placed on the fugacious pains in joint affections as an important distinction between rheumatic fever and pyæmia.

4. Joint affections caused by pyæmia need not be preceded by rigors, and might be accompanied by severe pain.

5. Great constitutional disorder is not always present during the first week of blood-poisoning.

6. Even at the onset of blood-poisoning, significant changes are present in the blood, which will, in connection with demonstration of micro-organism, settle the question.

7. Blood-poisoning might be present without any apparent wound or suppuration.

In concluding this paper, I would ask members whether an early amputation is justified in some cases, as an attempt at probably saving the patient. I think you will agree with me, that in this case the prognosis was fatal from the beginning.

Mr. SYME said there was no doubt that Dr. Ross's diagnosis was correct. His observations were certainly interesting. Pyæmia cases were often mistaken for typhoid or rheumatism. He noticed that Dr. Ross had not referred to the possibility of nasal or aural infection.

Dr. JAMIESON said that pyæmia may be produced without any marked outward manifestation. In this case, it obviously originated in the hand. Apparently, there was no indication of ulcerative endocarditis; no morbid sounds were heard over the heart, beyond a slight systolic murmur at the base, probably functional in origin. Micro-organisms have not been frequently found in the blood in

this disease, and their discovery in this case was one of the chief points of interest in connection with it.

The PRESIDENT complimented Dr. Ross on the excellence of his workmanship. There was no doubt that, in the future, the microscope, in the hands of skilled specialists, would play an important part in diagnosis. These pyæmic cases usually differ from cases of typhoid or rheumatism, in the irregularity of temperature they exhibit. There was no doubt that Dr. Ross's diagnosis was a correct one.

Dr. Ross, in reply, said that he could find nothing abnormal in the nose, and that he had been careful to examine the heart twice daily. The temperature had varied but slightly all through.

EXHIBIT.

Dr. J. W. BARRETT then exhibited two cases of hydatid of the orbit, which were improving rapidly under surgical treatment, and about which a full account will be given later.

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MEETING.

Wednesday, 29th May, 1889.

(Hall of the Medical Society, 8 p.m.)

The President, Dr. FISHBOURNE, in the chair.

There was a good attendance of members.

Dr. FISHBOURNE, after the minutes of the previous meeting had been read, announced that, with reference to the request of Dr. Henry, that members should give him abstracts of their papers for publication in the *British Medical Journal*, of which he is the Australian correspondent, the Secretary would make these abstracts, and supply them to Dr. Henry.

The minutes were then confirmed.

The following paper was then read :—

LEPROSY IN AUSTRALIA.

By ANDREW SHIELDS, M.D. Edin.

Leprosy is one of the most ancient of diseases, but neither its antiquity, nor its wide geographical distribution, succeeded in gaining for it the universal acceptance of its contagiousness, not

to speak of its pathology. In regard to its causation, one writer thus expresses himself :—"I know of no question in regard to which more rash opinions have been ventured than the one I am now entering on" (viz., the etiology of leprosy), "or in which opinions have been more utterly opposed to one another."* The words now quoted present a strong statement of the case, but those acquainted with the history of opinion on this subject will probably admit that they contain a broad basis of truth. Considering, then, that the disease has prevailed so long, and in so many countries, how are we to account for the diversity of opinion now mentioned?

There has been abundant opportunity for studying the subject, both in the individual and also in the history of its extension to various parts of the world. It has not only been transmitted from one generation to another in the same country, but it has spread from infected to non-infected races. Its existence among the Jews at an early period is well known, and although some have doubted whether Jewish leprosy was the same as that which is so named in modern times (viz. Elephantiasis Græcorum), some of the highest authorities admit the identity—as, *e.g.*, Danielssen and Böeck, of Norway; while, practically, the same view has been held by Erasmus Wilson and Tibury Fox in England, and by Kaposi in Vienna (Munro, p. 13). Granting, then, the identity of ancient and modern leprosy, it must be allowed that its spread from one country to another, over so many parts of the world, is strongly suggestive of the specific nature of the disease; especially when it is found that "the distinctive characters of leprosy are the same in all parts of the world where the disease has been observed,"† and that it has followed in the wake of commerce, war, or other forms of contact.

In early times, there seems to have been two chief centres of the disease, viz., India and the northern part of Africa. It existed among the Jews, at the time of their exodus from Egypt, about 1400 B.C., and was, no doubt, carried by them into their own country. From these centres, viz., the north of Africa, India, and Syria, it spread to Europe and America.

According to Pliny, it was unknown in Italy until the return of Pompey's army from the East, 62 years B.C., and it has been

* Dr. Munro, "Leprosy," p. 47.

† Report on Leprosy by the Royal College of Physicians, p. 64.

well remarked that Rome, in gaining an empire, paid, as one penalty, the infliction on generations then unborn, one of the most loathsome scourges that has ever afflicted the human race.* As numerous captives were also taken to Rome, some of them would probably carry the disease with them, and as Rome was then the mistress of the world, her intercourse with other countries was a ready means of communicating the disease. It spread through the south of Europe, from "the second to the seventh century, and reached its culminating point during the crusades of the eleventh and twelfth centuries."† So prevalent was the disease in the thirteenth century, that, it is said, 2000 leper houses existed in France alone, and 1900 throughout civilised Europe. It extended to Great Britain and Ireland; also to Holland, Denmark, and Sweden.

In the present century, leprosy has been so prevalent and so fatal in Norway, that a Royal Commission was appointed to inquire into the nature of the disease, &c. The report of the Commission was prepared by Drs. Danielssen and Böeck, in 1848, and printed by the Norwegian Government.

The "plague of leprosy," however, to use a significant Scripture phrase, has not been confined to the Old World, but has proved its contagiousness by spreading to the West Indies, where it is now very prevalent, and also to several parts of America. Dr. Munro, of Manchester, who was at one time medical officer at St. Kitts, in the West Indies, and to whose work on Leprosy I am indebted for valuable information on various points, states that, "all authors writing on the subject, agree that leprosy was first carried to America by the negro race," and, in proof of this, he mentions the fact that the disease has never been known "as existing among the aboriginal races, until after they had come in contact with the negroes," and further, that "wherever the indigenous tribes have come in constant contact with the blacks, or Portuguese, they have become infected."

Then, more recently, this scourge has extended its ravages to the Sandwich Islands, and during the present month fresh interest has been awakened in the subject by the death of the devoted Catholic Missionary, Father Damien, at the leper colony, in the islands now mentioned.

* Munro, p. 19; see the same writer for the above historic references, pp. 18 and 19.

† Erasmus Wilson. "Diseases of the Skin," 6th edition, p. 591.

New Caledonia has also become infected, and, according to recent news from French papers, the disease is spreading there rapidly.

Before referring to its existence in Australia, I would here call attention to the "Report on Leprosy," by the Royal College of Physicians, London, published in 1867.

In order to collect information on the subject, the committee appointed by the College, prepared a series of questions, which were sent out to various parts of the world. Returns were received from about 250 medical men, exclusive of laymen, such as Her Majesty's Consuls, and the Governors of British Colonies. The Committee formed its report upon the very extensive evidence thus obtained, and the following was their formal deliverance upon the question of contagiousness, viz., that "The all but unanimous conviction of the most experienced observers in different parts of the world is quite opposed to the belief that leprosy is contagious, or communicable by proximity or contact with the diseased. The evidence derived from the experience of the attendants in leper asylums is especially conclusive upon this point. The few instances that have been reported in a contrary sense, either rest on imperfect observation, or they are recorded with so little attention to the necessary details, as not to affect the above conclusion." (Page 69.)

Now, in the face of the long, palpable, and even flagrant, history of its contagiousness, how are we to account for such a conclusion? We find it spreading from its ancient home in Africa and the East, practically all over the world, and therefore, allowing the historic method its full weight, and judging by the criterion of self-propagation, we are forced to the conclusion that the facts are against the finding. In justice to the Committee, who analysed the evidence, and drew up the report, it must be admitted that they had to give a verdict, founded not upon their own observations and experience, but upon information supplied by others. This, however, does not explain how the Committee came to set aside the strong historic evidence in favour of its contagiousness. Suppose an opinion has to be formed of a case, in the absence of the patient himself, and merely from the statements of others who had seen and examined him some time previously, if the diagnosis arrived at in such a second-hand way was found to be strongly negatived by a very distinct and reliable history of the case, one would naturally expect a very guarded

opinion in the circumstances; and if there was some risk to others, as in the case of infectious diseases, one would further expect an opinion on the side of safety, an erring on the safe side, as it is called, until time, or further inquiry, determined the question at issue. And not only that, but in drawing conclusions from the statements of others, their competency, rather than their number, should be carefully considered; and the fact, also, that positive evidence of a thoroughly reliable character, however limited numerically, greatly outweighs the most voluminous statements of a negative kind. It is here, we think, that the Committee seem to have erred, because although the great bulk of the evidence, such as it is, is certainly against the contagious view, there is, in the returns furnished, also positive evidence to the contrary.

I shall give only one extract, taken from the island of Madagascar, which runs thus:—"It certainly deserves notice that, while the laws of Madagascar excluded leprous persons from society, the disease was kept within bounds; but after this law was permitted to fall into disuse, it has spread to an incredible extent. There is no doubt that this result is partly owing to lepers being allowed to marry without any hindrance, but the natives are strongly impressed with the conviction, that the disease is inoculable." (Page 221.)

Then, in addition to the spread of the disease from one race to another, it is well known that a leprosy bacillus has been found, and it has never been found anywhere else than in leprosy. Successful inoculation has recently been obtained, as mentioned in a leading article of the *British Medical Journal* of March 30th, 1889.

In view, then, of the strong and undoubted evidence of the contagious nature of the disease, it will be necessary for the Royal College of Physicians to modify still further their recent opinion in which they state, in a reserved and doubtful way, that if contagious "at all, it is only in a low degree, and under exceptional circumstances." But, although the College has of late somewhat modified its view, in favour of the contagious nature of leprosy, it still regards the compulsory isolation of lepers as unjustifiable.

In reference to the prevalence of leprosy in Australia, the disease is, with few exceptions, confined to the Chinese. It is known in one case only, and that in New South Wales, to infect a European. In Victoria, there are five lepers (all Chinese), in the

Leprosy Camp at Point Nepean. This small number shows that it has been decreasing in Victoria, for, in the return from this colony sent home to the College of Physicians, previous to 1867, it is stated that there were then 13 lepers among the Chinese population. It is possible, however, that some cases may exist unknown to the health authorities.

From inquiry, we learn that, so far as known, there is no leprosy in South Australia, except in the Northern Territory, where probably a few cases exist among the Chinese.

In New South Wales, the number of lepers has more than doubled during the last ten years. At present, twelve cases are known to the Board of Health, and one of these has undoubtedly contracted the disease in the Colony, of which he is a native, and of European parentage; another is a native of Java; the remaining ten are Chinese. No reply has yet been received to our inquiries respecting the prevalence of leprosy in Western Australia. For details regarding the extent of the disease in New South Wales and South Australia, we are indebted to the courtesy of the Presidents of the Boards of Health in Sydney and Adelaide, who kindly supplied the information.

In Victoria and South Australia, the Public Health Acts give power to isolate lepers; and although such an Act is not in force in New South Wales, the Board of Health strongly approves of isolation in such cases, and practically carries it out.

Under such restrictions, then, there is no occasion for alarm, as the disease is likely to be kept in check. The instinct of the people is also a natural safeguard, as the general belief in the contagiousness of this loathsome disease leads to its avoidance. The chief danger probably arises from unsuspected cases, unknown even to medical men, who may unwittingly be treating the leper for some other supposed affection. This is not at all unlikely in such a mixed community as obtains in these colonies, where the population is derived from so many nationalities. An instructive case bearing upon this point is given in the Leprosy Report of the Royal College of Physicians (p. 240). It occurred in the person of a young officer of the Indian army, who was born in India, of English parentage. He suffered from leprosy, although the disease was not recognised either by himself, or the Medical Board who examined and reported upon his case. He had at one time contracted venereal disease, and the case was treated as constitutional syphilis. As his health did not improve,

he was recommended change of climate, and went to England. In London, he put himself under an eminent hospital surgeon, who took the same view of his case as the medical men in India. Not getting better, he was seen in consultation by another surgeon, distinguished for his knowledge of syphilis, who also agreed with the view that had been taken of the case. At last the patient consulted Erasmus Wilson, who at once recognised the disease as leprosy, and his diagnosis was corroborated by Dr. Büeck, of Christiana, who happened to be in London at the time.

Dr. Wilson makes the following remarks in connection with this case:—"This case is peculiarly instructive, and especially on account of its association with syphilis. The resemblances of the disease to the constitutional symptoms of syphilis are, as we perceive, so close that they must necessarily be taken for syphilis by every medical man who has not had the opportunity of separately observing and studying elephantiasis." The mistake which occurred in India and England, may be repeated in Australia, and it not only shows the importance of medical men here making themselves well acquainted with the symptoms of leprosy, but it also gives us some idea of how little the disease may be studied, even in a country where it is prevalent; and yet, the College of Physicians informs us that more than one-half of the returns on which the "Report on Leprosy" was founded, came from India.

Dr. LE FEVRE thanked Dr. Shields for his paper. It was very interesting, and he thought it should be printed, at the expense of the Society, and forwarded to the various Colonial Governments. He thought that there was great risk of the disease spreading in these colonies, on account of our proximity to, and frequent communication with, Java and New Caledonia; the large hordes of Chinese in, and flocking into, the Northern Territory, were also a source of great danger. The disease was very serious, from its contagious nature, and from its long period of incubation, more particularly the latter. He had no idea that it was as widespread as Dr. Shields had shown it to be. The paper would put him on his guard in diagnosing cases of intractable syphilis. He thought the paper an excellent one, it was concise and intelligible to laymen.

Mr. KENNY remembered a case exactly similar to the one quoted by Dr. Shields. It occurred in October 1888, in the

clinic of Professor Nothnagel, in Vienna. Mr. Kenny gave a description of the case, but referred members to the *British Medical Journal* of March 2nd, 1889, where the case was fully reported. Patient was under treatment for intractable syphilis by Professor Neumann, and subsequently by Nothnagel. Anæsthetic leprosy was diagnosed by Professor Kaposi.

Dr. ROWAN had had two or three cases under his care in Sandhurst Hospital many years ago. He believed that it was contagious, and thought it to be the duty of the authorities to isolate all cases at once, and thoroughly. He hoped that, at a future date, Dr. Shields would make further communications on the subject.

Dr. RUDALL asked Dr. Shields to say a few words on the diagnosis of leprosy. How far did the case of anæsthetic leprosy, referred to by Mr. Kenny, agree with those cases of leprosy in the Colony? Is the leprosy here anything like that mentioned in the Bible? Is there any relation with elephantiasis or with lymph scrotum? What is leprosy? He took it that specific lepra had nothing to do with the matter whatever.

Dr. FISHBOURNE thanked Dr. Shields for the paper, but would like to see it amplified before publication. Dr. Shields had shown that leprosy was very prevalent in England and Ireland at one time, but Dr. Fishbourne thought that it was now wiped out as a result of the cleanliness of the people, and on that account he did not entertain much fear of leprosy in this Colony. He thought that isolation was a very serious step, and that very grave precautions should be taken, and very careful examination should be made, before such an extreme step was taken. Speaking for himself, and he thought for the majority of general practitioners, leprosy was not very well known. Medical men should guard against being carried away with the idea that leprosy was very contagious. Dr. Shields, in quoting the opinion of the Committee of the Royal College of Physicians, had said that it was contagious only in a *low* degree. Under the Amended Health Act, it took five medical men to place a patient in a lunatic asylum, whereas only three were required to send a leper into complete exile. It was quite possible that a peculiar case of syphilis, frambæsia, or other cases might be sent in error, and once in a leper house, there was no hope of discharge.

Dr. HOOPER asked, what were the modes of contagion? In the two cases mentioned to-night, sexual connection was the source. Was that the only mode?

Dr. SHIELDS, in reply, stated he was convinced of the contagious nature of leprosy. Contact with an abrasion of the skin might carry the disease. Probably, as with syphilis, almost all the secretions of the body might carry it. The general diagnosis was too large a subject to open now; he would be glad to give that at a future date. Leprosy of the Bible and leprosy of the present were identical. There is no connection between *lepra vulgaris* and true leprosy. Heredity was generally accepted. Curiously, one child might be affected, even from birth, whilst the others would escape. His paper was not intended to be exhaustive—it was a mere *resumé*.

Dr. RUDALL hoped for a further communication from Dr. Shields. He had seen a few cases of anæsthetic leprosy, but saw no reason for isolating them. He thought the present Act was very dangerous.

Dr. SHIELDS thought some elements of danger existed in the Acts applying to small-pox, lunacy, &c.

Dr. LE FEVRE thought that there were sufficient safeguards in the Act as it stands.

The President, Dr. FISHBOURNE, read a letter from Dr. Meyer, regretting his inability to be present to read his "Notes on a Rare Case of Midwifery."

Australian Medical Journal.

JUNE 15TH, 1889.

INCREASED HOSPITAL ACCOMMODATION.

The extension and improvement of our hospitals is a subject of such importance as to need no apology for its further discussion. The Treasurer has agreed to put £10,000 on the Estimates for immediate hospital requirements, and the question at once arises, What should be done with the money? According to the deputation that waited on the Treasurer, the sum is "to be expended in certain directions in a manner which would enable the present general hospitals to get rid of many cases which now encumber their beds, and which ought more properly to be, and would

be more economically cared for, in establishments of a different nature."

This somewhat vague statement presumably means, that the Austin Hospital is to be enlarged, and Convalescent Hospitals built, or extended. The Treasurer, however, threw out a hint that two new wings might be erected at the Alfred Hospital, providing accommodation for 150 patients. The deputation further stated, that the expenditure of the money obtained would be entrusted "to a Committee, selected by those who contribute to the funds," the representation to be proportional to the amount subscribed, and "the same principle could be applied to money contributed by the State." The Executive Committee, however, at a meeting held on the 12th inst., appointed a Sub-Committee, to draw up suggestions as to the best mode of utilising the money obtained, and, at the same meeting, Dr. Embling, who is on this Sub-Committee, and who is also Chairman of the Alfred Hospital Honorary Staff, took care to emphasise the Premier's remark, that the £10,000 was to be used to increase the accommodation of one of the existing hospitals. It is of the utmost importance that the subscribers to the fund, and those interested in the matter, should insist on the money being devoted to the purpose for which it was subscribed and according to the terms of the request to the Treasurer, viz., to provide patients now in the general hospitals with accommodation *in establishments of a different nature*, and they should see that this is done by a Committee elected by themselves.

In a previous article, we stated that "the Austin and Alfred Hospitals could readily be enlarged;" but, if the managers of the latter institution insist on carrying out the recommendations of their Secretary with regard to paying patients, a very strong protest must be entered against the Alfred Hospital being enlarged by a Government subsidy. The recommendations in question are that three classes of paying patients should be instituted:—Class A, paying £5 5s. per week; class B, paying £3 per week; while for a third class, to be called contributing patients, a sliding scale of charges is to be adopted, of from 10s. to 30s. per week,

according to the patient's circumstances. We contend that it is obviously unjust that a hospital, built and maintained by voluntary subscriptions and Government grants, should compete in this way with private enterprise. That those who can pay for hospital accommodation should do so, and should be afforded the opportunity for doing so, is only fair; but self-supporting and charitable institutions must be kept distinct, otherwise there is danger that the pauper patients will not receive their due. The following statement, by the Secretary to the Alfred Hospital, is somewhat significant:—"The ordinary accommodation in the paying wards is for 22 patients; but during the recent pressure on the hospital accommodation, the number of inmates has been as high as 26;" that is to say, that room could be found for paying patients, while unfortunates who could not pay were turned away.

In the last number of the *Journal*, it was suggested that the various Friendly Societies might combine to erect a hospital, and this idea, or some modification of it, has been urged by several correspondents of the daily Press. From the just-issued report of the Government Statist on the Friendly Societies, it appears that they have an excess of income over expenditure of about £48,000 per annum, and that the interest on investments was £35,575. If this interest were put into a sinking fund, sufficient money for the erection and maintenance of a hospital for their members, and for paying patients, would soon be obtained. In any paying hospital, however, one principle must be insisted on—patients must be allowed to choose their own medical attendant, and there must be no regular staff beyond, possibly, a paid resident or residents.

The great strain on the hospital accommodation is due to the excessive prevalence of typhoid fever, and we would again urge the desirability of erecting Fever Hospitals. The various municipalities might well levy a rate for this purpose, as it has been suggested they might do for contributing to the General Hospital Fund. It is to be hoped that if the present insanitary condition of the metropolis is improved, the strain on the hospitals from zymotic disease will be relieved. In

the meantime, however, and at the present juncture, if Parliament vote the £10,000, it probably could not be better expended than enlarging the hospitals for convalescent, chronic, and incurable cases; it could not be expended in a worse manner than in patching up or adding to the Melbourne Hospital; and for the reasons stated, it ought not to be expended in extending the Alfred Hospital.

One final remark. The hospital difficulty is not a local one. The London Charity Organisation Society has just petitioned the House of Lords to appoint a Royal Commission of Inquiry into Medical Relief in London. Many authorities assert that the hospital system of Great Britain has altogether broken down, while almost all agree in the necessity for some central organisation to regulate the hospital needs of the whole community. This need is no less imperative in this colony.

Reviews.

Epitome of Surgery. By Ridley Dale, M.D., M.R.C.S.E., &c.,
Surgeon to the Hospital for Foreign Seamen, Sunderland.
London: H. K. Lewis, 1889, pp. 498.

An epitome usually means an abridgement, something that is cut down, and one is inclined to ask is it possible to usefully epitomise such a subject as surgery? Dr. Ridley Dale, after twelve years' experience of teaching students, is of opinion that the question can be answered in the affirmative, and has accordingly produced "a synopsis of the most important points in surgery," to be used by students as a remembrancer just prior to examination, and after they have perused one of the standard text-books on the subject. We should be inclined to answer the question in the negative. It is an excellent and very advisable thing for any student to take short notes as he reads, and so prepare for himself a kind of synopsis of the subject, which can be revised with benefit shortly before examination. This sort of work, however, cannot be usefully done for him by another, and, whatever the intention of the author may be, books like this by Dr. Dale are, and always will be, used simply for the purpose of cramming, by students who are too lazy to read the standard text-books, or to attend to their practical work.

The book, however, is really very much more than an epitome; it is a fairly comprehensive treatise, the subject matter of which has been very judiciously abstracted from a variety of sources, and is compressed into the space of about 500 pages by the use of concise language, the avoidance of argument and disputable questions, and much more by the use of small type and very close printing, than by any curtailment of information, which is very full, accurate, and admirably arranged. Dr. Dale is evidently loyal to the traditions of his old school, University College; and, though many writers have been laid under contribution, the author appears to follow Erichsen tolerably closely in the main.

G. A. S.

The Art of Dispensing: A Treatise on the Methods and Processes involved in Compounding Medical Prescriptions. Second Edition. Published at the offices of the Chemist and Druggist, London and Melbourne, 1888. Illustrations, 280 pp.

Almost the only book of its kind, and certainly the best, is "The Art of Dispensing," and although compiled especially for pharmacists, it may be read with no little profit by prescribers.

One of the first chapters deals with the relations existing between prescribers and dispensers, and contains a complaint from the latter, as to the ambiguity often indulged in by the former in the writing of prescriptions, for instance, tinct. cinchonæ is often ordered in mixtures. Until the 1887 edition of the British Pharmacopœia was published, the only official tincture of this drug was made with the yellow bark, now the red is ordered, yet there is no law compelling dispensers to use the latter. Again aqua menth. is often ordered, and the druggist is at a loss to know whether aqua menth. pip., or aqua menth. viridis, should be used. Likewise, liq. morphinæ may mean either the acetatis or the muriatis, the difference being sometimes important, as when liq. plumb. subacet. is combined, here the liq. morph. mur. would precipitate plumbic chloride.

Prescribers are invited to always initial unusual doses, for in many instances, the official dose is much below that often prescribed. Potas. iodid., for example, 2 to 10 grains; extract ergotæ. liq., 10 to 30 minims; croton-chloral hydrate, 5 to 15 grains. In the German Pharmacopœia, a table of maximum doses is given, and doses ordered above those, unless marked by prescribers, are not allowed to be dispensed by druggists.

The chapters on "Mixtures," well pay perusal, and if the knowledge gained were utilized, it would be the means of oftentimes causing less irritation to the patient's palate, gastric mucous membrane, and temper, and less trouble to the dispenser.

The "Saturation Tables," for effervescing mixtures, concise and handy, are compiled by Professor Attfield.

"Incompatibility" receives due prominence in a brief space. It is refreshing, if a little startling, to be reminded that chloroform, in a mixture containing opium or its preparations, will dissolve the narcotine, and may cause an overdose of the alkaloid to be given with the last dose, unless the bottle be well shaken before using every time. Strychnine, again, is precipitated from its solution by alkalis and their carbonates; hence liquor strychninæ and liquor arsenicalis, when combined, require a "shake" label.

The "Emulsions" are always difficult to manage. Tincture quillaia is now considered the best emulsifier of oils and oleo. resins, as turpentine. The ext. filicis maris is best treated by it.

In discussing "Powders," the hint is dropped that care should be exercised to prevent alkaline powders being given in jam, as is so often done. Jam is acid; treacle is alkaline.

"Pill Excipients" are carefully treated. One or two may be mentioned. Balsam of Tolu (washed) is the best for phosphorus, powdered curd soap for creosote. The same, with a little glycerinum tragacanthæ for croton oil, ung. resinæ for fer. et quin. cit. Powdered tragacanth (1 grain), and a drop of water for antipyrin (5 grains).

The book closes with some very remarkable examples of illegible prescriptions, which present the most curious conundrums in obscure caligraphy anywhere to be found. F. B. C.

The Students' Text-book of the Practice of Medicine. By Angel Money, M.D. Lond., Assistant Physician to University College Hospital, and to the Hospital for Sick Children.

This work in object resembles Dr. Dale's "Synopsis of Surgery," being an attempt "to produce a very concise book of modern medicine, which may prove useful to those who are beginning the study of medicine, to those who are preparing for examination, and to practitioners who have no time or inclination to peruse treatises." Like Dr. Dale's work, we are afraid it will be almost

solely used for the purposes of cramming for examination, and it is a pity that Dr. Money should have spent such good work for such a bad object. "To give a right conception of disease and its treatment has been more the writer's aim, than to state all that has been written about it." With this aim no one would quarrel; but the other, and apparently primary object, has been so well carried out that the book is one to be reluctantly condemned. Dr. Money is already very favourably known by his writings, and has evidently read much and thought much. He is, further, actively engaged in teaching, and in this little book he seems to have just reproduced, in a very condensed form, jottings and notes of his studies, and of what he is accustomed to tell his students. He has, as it were, skimmed the literature of medicine, and presented us with the cream. To the majority of people, however, cream is not by itself a very digestible article of diet, and this sort of literary cream cannot be recommended as good mental pabulum for the student. It is to be regretted that able men like Dr. Money and others condescend to pander to the growing demand for this class of work.

G. A. S.

Extracts from the *Medical Journals*.

DISEASES OF THE NOSE AND THROAT.

The three agents which have revolutionised naso-pharyngeal surgery are:—cocaine, the galvano-cautery, and the use of either the oxygen-hydrogen or the electric lights. Perhaps of the three agents, first place must be assigned to the galvano-cautery. One of the inconveniences which has attended the use of the cautery, however, has been the unreliable nature of the bichromate, and of the sulphuric and chromic acid batteries with which it is usually worked, and we hail with pleasure improvements which tend to minimise the inconvenience. The batteries referred to act efficiently, but the electro-motive force progressively diminishing, frequent changing of the fluid is required, and much inconvenience is caused.

An attempt has been made to overcome the difficulty by the construction of storage batteries (Electrical Power Storage Company, Limited). These storage batteries give an absolutely constant current for a specified period, and in London are refilled

for surgeons by Messrs. Coxeter and others. In Australia, where the filling of an accumulator cannot be so conveniently effected, we have found sulphate of mercury batteries of the greatest convenience, since they give a fairly constant current for a considerable period of time.*

Valet does not remove tonsils in patients more than 17 or 18 years old, but practises ignipuncture. The advantages of the thermo-cautery are :—

1. The ease in its application.
2. Its innocuousness.
3. The possibility of graduating the atrophy.
4. Its applicability to cases in which a cutting instrument is contra-indicated.
5. The absence of the three complications sometimes observed after tonsilotomy—(recurrence, diphtheritic contagion, hæmorrhage).†

Fuller records a case, in which the removal of a tonsil by a tonsilotome, in the case of a young man, an athlete, 25 years old, was followed by such hæmorrhage, that the common carotid artery had to be ligatured, and 12 ounces of saline solution transfused. The ligature of the carotid failed to arrest the hæmorrhage, which apparently stopped from fainting. The patient was not a bleeder.

Nieden believes that the development of chronic rhinitis into ozœna is largely due to the absence of the moistening of the nose by the tears; the nasal duct being affected. He also believes that phlyctenular keratitis almost invariably has its origin in a disease of the nose.

Gradle has found the following ocular symptoms result from nasal disease :—

1. Lachrymation, where there is no primary reason, lesion even of the tear passage, or of the eye.
2. A feeling of fulness of the lids, and itching with, or without lachrymation, sometimes with more or less pain in the eyes. The affection is a reflex one, due sometimes to polypi, more generally, to chronic rhinitis.
- 3, 4, 5. Forms of conjunctivitis.
6. Sudden congestion of the lids.
7. Sudden œdema of the lids.

* *British Medical Journal*, March 9, 1889.

† *Gaz. Des. Hop.*, November 17th, 1888. (Abstract.)

Lennox Browne concludes a paper on the relative merits of early and late tracheotomy, in chronic disease of the larynx as follows :—

1. Early tracheotomy, with retention of the tube, is advocated in chronic sub-glottic laryngitis, and in perichonritis, causing sub-glottic stenosis.

2. Tracheotomy, either early or late, is not advocated in tuberculous laryngitis.

3. It is but rarely necessary in lupus.

4. It is to be performed in cedema, occurring during the course of a syphilitic laryngitis, only after patient treatment has failed ; and when performed for such a condition, there is a fair chance that the tube may, after a time, be dispensed with.

5. Tracheotomy is preferable to attempts at dilatation, in the case of syphilitic stenosis, and the tube has generally to be retained for life. Not unfrequently, the operation fails, on account of inability to reach the seat of stricture.

6. The operation may be necessary in benign growths of the larynx ; and, when indicated, is better performed early.

7. Early tracheotomy is strongly advocated in malignant disease of the larynx, as the safest and surest means of prolonging comfortable life, and in this respect, is superior to attempts at radical extirpation.

8. Tracheotomy is necessary in cases of bilateral paralysis of abduction, and should not be delayed, if treatment fails to arrest the progress of the disease. It is seldom successful in cases of dyspnoea, caused by pressure low down in the trachea.*

Butlin has reported two cases, in which he divided the thyroid cartilage, opened the larynx, and removed a carcinomatous patch in the larynx. In the one case, there was no recurrence in twelve months ; in the other, in about six months.†

J. W. B.

THE SANITARY COMMISSION has been sitting regularly throughout the month. At its meeting on the 21st ult., Mr. A. C. Mountain, the city surveyor, gave evidence as to the drainage system that should be adopted for Melbourne. He was strongly in favour of the water-carriage system, designed on the absolutely separate principle, and discharging into irrigation areas or intermittent filter-beds. At the meeting on the 4th inst., Mr. W. F. Bell, M.I.C.E. of Ireland, gave evidence relative to a system which he had formulated for the drainage of Melbourne.

* *Journal of Laryngology*, April, 1889.

† *Proc. Clin. Soc. Lancet*, January, 1889.

University Intelligence.

THE MELBOURNE UNIVERSITY.

At the meeting of the Council, held on the 3rd inst., the Chancellor moved, in accordance with the recommendation of the medical faculty:—"That the Chair of Anatomy and Pathology be divided into two Professorships, one of Anatomy, and the other of Pathology; and that Professor Allen be asked which of these Professorships he would wish to hold, and that immediate steps be then taken to fill the other Professorship."

After some discussion, the following amendment, proposed by Dr. Morrison, was accepted by the Chancellor, and agreed to by the Council:—"That it is desirable that the Chair of Anatomy and Pathology be divided into two Professorships, as soon as funds are available, and that the Government be asked to vote the sum of £1000 for this purpose."

At the meeting of the Council on the 10th inst., a communication was received from the Faculty of Medicine, recommending an amendment of the regulations, so as to ensure that every candidate for a degree in medicine should have studied practically the diseases of women, during a period of at least six weeks, and received practical instruction in that department.

After some discussion, it was decided not to adopt the recommendation of the Faculty, most of the medical members of the Council being opposed to it.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee, held on the 14th ult., Dr. C. D. Gray, honorary physician to the out-patient department, was granted leave of absence for six months, in order to visit Europe on family affairs.

Mr. J. S. Butters moved that a new appointment should be made to the staff, namely, that of a suitable salaried officer to perform the duties of registrar and assistant house surgeon. It was advisable that there should be some competent qualified surgeon, to take charge of serious cases whenever the Medical Superintendent might be temporarily absent.

It was decided to postpone the motion for a fortnight, and, in the meantime, to submit it to the Honorary Medical Staff for a report.

The following gentlemen were elected Resident Medical Officers of the Institution, namely:—Messrs. E. L. Gault, F. J. Drake, and Thomas Murphy (Honourmen), and Messrs. F. H. Langlands and J. F. Rudall.

ALFRED HOSPITAL.

At the meeting of the Committee, held on the 17th ult., the report of the Secretary on the working of the paying wards was adopted. It showed that, during the two years and eight months that the wards had been open, 443 patients had been admitted. The average number of patients per week at first was 9, but is now 15. The total receipts from paying patients were £5399 1s. 6d., of which £2203 17s. 6d., including £344 5s. for operations, went to the Medical Staff. It recommends that the charge for class "A" patients be raised from £4 4s. to £5 5s., and for class "B," from 50s. to 60s. per week. It also recommends that, in providing additional accommodation, wards be provided for "contributing" patients, who would pay from 10s. to 30s. per week, according to the patient's circumstances.

At the meeting of the Committee on the 31st ult., a week's leave of absence was granted to Dr. C. H. Molloy, resident physician, in order that he might recruit his health, Dr. Howitt to act as *locum tenens*.

WOMEN'S HOSPITAL.

Dr. R. H. Fetherston, who has been performing the duties temporarily since the resignation of Dr. Anderson, was elected to fill the position of resident medical officer to the infirmary department.

At the meeting of the Committee, held on the 7th inst., a report was received from the resident medical officer, regarding the efficiency of the nursing arrangements in the infirmary department. None of the present day nurses had any real experience in the details of purely gynæcological nursing previous to coming to the hospital, and could only be said to be learning the details. The head nurse was new to the hospital, and there had been an insufficient number of nurses in this department. The nursing, on the whole, had been fairly well done, and there was no cause of complaint, except when

any special knowledge was required, and in these cases he had trusted as little as possible to the nurses. He suggested that the staff for the wards alone consist of head nurse, two assistant nurses night nurse, and two or three pupils, and that every effort be made to keep that number always in the wards.

INCREASED HOSPITAL ACCOMMODATION.

During the past month, great activity has been displayed by those interested in securing additional hospital accommodation. Meetings have been held in most of the suburbs, and promises of considerable sums have been made. On the 6th inst., a large and representative deputation waited upon the Treasurer, to urge that a grant of £10,000 should be given by the Government towards providing extra accommodation for the sick and suffering poor, which is not afforded by the present hospitals of the city and suburbs, and that sufficient sums should be voted from time to time, for the establishment of a first-class general hospital in Melbourne, replete with all modern appliances, and constructed in accordance with the best principles of sanitation. The deputation, which numbered about 80 gentlemen, was introduced by Mr. Zox, M.L.A., and Mr. Stuart, M.L.A., and included members of both Houses of the Legislature, Sir B. Benjamin (the Mayor of the city), mayors of the suburbs, Bishop Goe, Sir Arthur Nicolson, and leading citizens. Mr. Gillies agreed to put the sum of £10,000 on the estimates for present requirements, but pointed out that the proposed erection of a new hospital was a matter for the gravest consideration. There would be great difficulty in securing a site for an institution having 500 beds, as was suggested, and its annual cost of maintenance would not be less than £50,000. If such a hospital were considered absolutely necessary, however, and there were gentlemen who would undertake the management of it, the Government would, doubtless, feel that it was its duty to supplement private subscriptions, in order to secure its establishment. Before committing himself to such a proposition, he would like to receive the fullest information in regard to it, and to confer with a smaller deputation as to details. He would also have to consult his colleagues on the matter.

Edward Henry Embley, M.B., has been appointed certifying medical practitioner for Sandhurst and Castlemaine, temporarily, during the absence on leave of Oliver Penfold, M.B.C.S.E.

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and suburbs, for April 1889, shows that the births of 1344 children, viz., 687 boys and 657 girls, were registered. The deaths registered numbered 982, viz., 523 males, and 459 females. The births thus exceeded the deaths by 362, or 37 per cent. To every 1000 of the population of the district, the proportion of births registered was 3·07, and of deaths 2·24. One hundred and eighty-two deaths, or 19 per cent. of the whole, took place in public institutions.

The number of children under 1 year who died was 253, the total number under 5 years being 402.

Deaths from whooping-cough numbered 22 in April, as against 7 in March; and deaths from diphtheria numbered 26, as against 18. On the other hand, deaths from diarrhoeal diseases fell from 61 to 40; and deaths from atrophy and debility (chiefly of infants and young children), fell from 110 to 95. The following deaths were set down to typhoid or enteric fever during the first 4 months of the year under notice, and of each of the previous 4 years.

DEATHS FROM TYPHOID FEVER.

		1885.	1886.	1887.	1888.	1889.
January	...	12	29	40	39	70
February	...	25	39	70	63	64
March	...	23	35	59	54	91
April	...	25	52	57	43	113
		—	—	—	—	—
Total	...	85	155	226	199	338
		—	—	—	—	—

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—George Augustus Macnutt, Caulfield, M.R.C.S. Eng. 1881, L. et L. Mid. R.C.P. Edin. 1882, M.D. Brussels 1885; George Purcell Atkins, Hawthorn, L.A.H. Dubl. 1869, L.R.C.P. et B.C.S. Edin. 1873, L. et L. Mid. 1882, Dip. State Med. 1883, K.Q.C.P. Irel.; Thomas Augustus Quirk, Melbourne, M.R.C.S. Eng. 1888, L.R.C.P. Lond. 1888; Herman Fermor Lawrence, Fitzroy, L. et L. Mid. R.C.P. et R.C.S. Edin. 1888, L.F.P.S. Glas. 1888; Denis Paul O'Farrell, Fitzroy, L.R.C.S. Irel. 1874, L.K.Q.C

Irel. 1874. Additional qualifications registered:—No. 1522, Charles H. Hill, Melbourne, Ch. B. Melb. 1889; No. 1514, Arthur G. H. Colquhoun, Kingston, Ch. B. Melb. 1888; No. 1517, Charles Seal, Buninyong, Ch. B. Melb. 1888; No. 1452, John E. J. Deane, Williamstown, L. Mid. F.P.S. Glas. 1887. Name of deceased medical practitioner erased from the Register:—No. 425, Henry Meyler, L.A.H.

HEALTH OFFICERS.—The following appointments have been confirmed:—Shire of Ballan, Central, South, and West Ridings—Alexander Corry, M.D., *vice* N. Sisco, M.D., resigned; Shire of North Ovens—Edward John McCordel, M.D., *vice* Archibald M. Macfarlane, M.B., resigned; Shire of Gordon—William Joshua Bird, M.B., and Hugh Alexander Deravin, M.B., re-appointed; Shire of St. Arnaud, Wycheproof and district—Harry Massey Massey, M.R.C.S., *vice* Henry Stoker, L.K.Q.C.P., resigned; Shire of Gisborne—Ulick Arthur Daly, M.B., *vice* George H. Salter, M.R.C.S., resigned; North Melbourne—Joseph Whitaker, M.D., *vice* George Moore, M.D., resigned.

PUBLIC VACCINATORS.—The following appointments have been made:—Sandhurst—Edward Henry Embley, M.B., temporarily, during the absence on leave of Oliver Penfold, M.R.C.S. Eng.; Toorak—Francis Armand Nyulasy, M.B., *vice* John Edward Usher, L.R.C.P., whose resignation has been accepted; Healesville—John Chalmers Baird, M.B., *vice* B. Stevenson, L.R.C.S., whose resignation has been accepted; Surrey Hills and Doncaster—William Henry Stook, L.F.P.S., *vice* E. Harkness, L.R.C.S., whose resignation has been accepted; Beechworth—Abraham Haynes, L.R.C.S., *vice* A. H. Parker, L.R.C.P., whose resignation has been accepted.

H. Sydenham Lyons, M.B., has been appointed temporary medical officer, Hospitals for the Insane.

Dr. G. T. Howard, M.A., has been appointed demonstrator of anatomy at the Medical School, as *locum tenens* for Mr. Syme.

The trial of Dr. Edward G. Figg, of Williamstown, on the serious charge preferred against him in connection with the case of Mrs. Dietrich, a widow, residing in Andrews Street, Windsor, on the 9th April, was commenced and concluded on the 28th ult. at the Supreme Court Criminal Sittings, before Mr. Justice Hodges and a jury of twelve. The question submitted to the jury for their consideration was whether Dr. Figg's treatment of the case was carried out with any criminal intention. After twenty minutes' deliberation, the jury returned a verdict of not guilty, and the accused was thereupon discharged.

The report of the Health Officer of the City of Melbourne (Dr. Jamieson) for 1888 shows that in Melbourne proper, with a population of 74,434, there were 1380 deaths, that is, at the rate of 18.54 per 1000. In 1887 there were 1503 deaths, or 20.6 per 1000. In the whole metropolitan area, the death-rate was 20.54, that for the parts outside Melbourne proper being 21.26. Deaths from zymotic diseases, which were 90 in 1887, and 79 in 1886, were only 63 in 1888; whilst in the whole metropolitan area, there were 636 deaths from zymotic diseases, as compared with 589 in 1887 and 549 in 1886. The deaths in the whole of Melbourne from typhoid numbered 328, but while 17.8 per cent. of the population belongs to Melbourne proper, its proportion of the deaths was only 12.5. Diphtheria has been unusually prevalent and fatal, the number of deaths from it being larger than in any

previous year. But of the 266 deaths, only 20, or 7·5 per cent. of the whole, instead of nearly 18 per cent., were recorded against the city. The lower death-rate in the city is attributed to better sanitary arrangements. The surface is better drained, and waste matters are more frequently removed. But the drainage, even of the city, is of the most rudimentary kind; household rubbish might be more frequently removed, and the system of nightsoil collection and disposal might be vastly improved. With a proper system of underground drainage, including water-carriage, removal of nightsoil, and with scavenging more frequently done, Melbourne might be made one of the healthiest cities in the empire. The cost might be great, but it would be fully repaid in the saving of lives and the improvement of health; and therefore, the utmost efforts should be made to obtain the early adoption of a measure for constituting a Metropolitan Board of Works, as the first step towards the adoption of a comprehensive system of drainage of the metropolitan area. In the meantime, too much attention cannot be given to securing that means of escape shall be given to surface water, by making yards, rights-of-way, and street channels, in such a way that soakage shall be reduced to a minimum. During the last two years especially, much has been done in that direction, and I believe the results are to be seen in the improved health of the population.

BIRTHS.

BIRD.—On the 22nd ult., at Boort, the wife Dr. W. J. Bird, of a son.

CARNEY.—On the 20th ult., at Oakleigh, the wife of Dr. J. H. Carney, of a son.

GURDON.—On the 17th ult., at Bohemia, Middle Brighton, the wife of Dr. E. J. Gurdon, of a son.

SCOTT.—On the 15th April, at Cordillera, N.S.W., the wife of H. J. H. Scott, M.R.C.S., Eng., &c., of a daughter.

MARRIAGES.

STEWART—M'FARLANE.—On the 15th ult., at Christ Church, North Adelaide, by the Rev. H. M. Pollitt, Robert Stewart, M.D., Hindmarsh, S.A., son of R. Stewart, Mount Rowan, Ballarat, to Alice, fourth daughter of Allan M'Farlane, Wellington Lodge, Lake Alexandrina, S.A.

TURNBULL—M'MILLAN.—On the 24th ult., at 171 Toorak-road, by the Rev. D. S. Maxwell, assisted by the Rev. C. F. Howe, James Turnbull, to Mary, eldest daughter of T. L. M'Millan, M.D.

VAUGHAN—SHIERLAW.—On the 9th ult., at the Scots Church, Collins-street, Melbourne, by the Rev. Alexander Marshall, M.A., Alfred P. Vaughan, M.B. et Ch.B. Victoria, eldest son of Thomas Vaughan, Sunnyside, South Barwon, to R. Alison (Alice), daughter of George C. Shierlaw, Unley-park, South Australia.

DEATHS.

MEYLER.—On the 11th ult., at his residence, Winchelsea, Dr. Henry Meyler, native of Dublin, Ireland, aged 64 years.

RANKIN.—On the 14th ult., at Ards, Charnwood-road, St. Kilda, Delia Mary, fifth daughter of W. B. Rankin, F.R.C.S.E., aged 21 years.

TWEEDDALE.—On the 5th inst., at 126 Nicholson-street, Isabel Ellen Pope, dearly loved wife of J. Dunbar Tweeddale, and eldest daughter of the late Thomas Pope Besuard, of Canada West.

THE
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Original Articles.

SOME FURTHER NOTES ON A CASE OF SEPTO-
PYÆMIA.

By Dr. Ross, Macarthur.

[With Plate.]

In the *Gazette Médicale de Paris* 1888, No. 44, Dr. Legrand describes two cases which he calls "Pseudo rheumatisme infectieux d'origine traumatique." These two cases bear a great resemblance to the case reported by me.

The first originated from a fracture of the phalanx of the left thumb, which got well. Three weeks later, pains in the right arm and shoulder were felt. Case terminated fatally, within five days. The other one originated in a compound fracture of the left leg. Nine days later, rigors, pain in joints, offensive sweats, &c., set in. Energetic surgical treatment succeeded in saving the patient in ten days. In both cases, salicylate of soda proved a failure. In neither case was pus or blood examined microscopically.

In my paper, read before the Medical Society of Victoria, at the June meeting, I mentioned my doubt as to the identity of the microbacterium and micrococcus pyogenes found.

The examination of my slides convinced me that the false interpretation was due to alterations in the bacillus, caused by the process of staining. By this process, the bacillus contracted into ovoid cells, and so misled me as to its true nature.

In Fig. 2, a correct drawing is given of one of the slides which was examined after the paper was read. (Oil-immersion $\frac{1}{12}$, ocular ii; 525 to 1 Abbe's condenser.)

The bacillus is the same which I found in the red cells: some lying in pairs, end to end, forming a more or less straight line; some, a more or less curved line; some, a more or less open angle—a phenomenon which I always noticed whenever I found them in the red cells. The bacillus is straight, with few exceptions, some appearing slightly curved. It is smaller than the tubercle bacillus, about two and a

half times its width in length, about half the diameter of a red blood cell. Where the bacillus is found in heaps, they are lying not so close together as the former; the single members more or less parallel, sometimes one or two are crossing these, so as to form a delicate grating. I never found them together in great abundance. In the same figure, a few micrococci pyogenes are seen. With oil immersion $\frac{1}{2}$, ocular 3, the bacillus appears to have rounded ends. No spores or capsule are visible.

Fig. 1 gives a drawing of micrococcus pyogenes. In all slides the contrast between the blue-stained micro-organism and the green-stained red cells, is most marked. The leucocytes have a reddish tint. In the same slide, but in different parts, I found both micro-organisms.

I am at a loss what to call the bacillus. As far as my knowledge goes, there has not been such a bacillus demonstrated in the human blood before. Micrococcus pyogenes has been found in cases of pyæmia before.

TWO CASES OF DERMATITIS HERPETIFORMIS.

By A. W. FINCH NOYES, Jun., M.R.C.S. Eng., L.R.C.P. Lond., &c.

Before entering into the details of the cases in point, it will, perhaps, be as well to give a short review of the subject of "Dermatitis Herpetiformis" first so-called by Duhring of Philadelphia. The term hydroa, used by Bazin, Tilbury Fox, and quite recently revived by Crocker, as applicable to this class of cases, is good if understood to mean "a bullous eruption associated with erythematous lesions, and intense itching;" but its retention, unless Crocker's definition is kept in mind, we think likely to lead to confusion, owing to its even present indiscriminate application to many conditions which have no right to be included in the group under consideration; for instance, to vesiculating exudative erythemata, especially herpes iris, by American writers; to a bullous eruption of iodic origin, by Hutchinson; and to various vesiculating lesions by other authorities. We have, therefore, chosen Duhring's more recent name.

The topic becomes of especial interest, not only on account of the past and present much disputed relationship of a certain class of vesicular, pustular, or bullous lesions, which are associated with erythema—to the exudative erythemata on the one hand, and to pemphigus on the other; but also on account of its pending

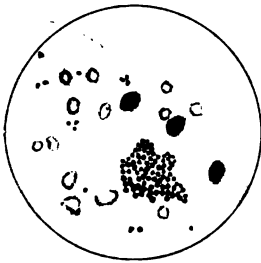


FIG. 1.
System 7, ocular iii, 600 : 1.

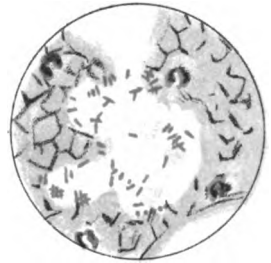


FIG. 2.
Oil immersion $\frac{1}{17}$, ocular i, 525 : 1.

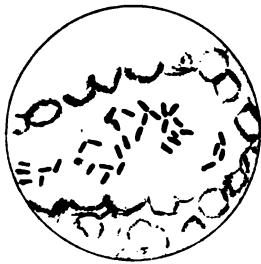


FIG. 3.
Oil immersion $\frac{1}{17}$, ocular iii, 1000 : 1.

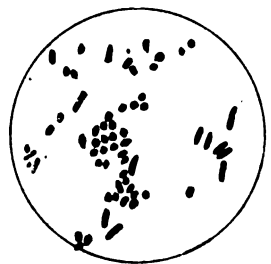


FIG. 4.
Oil immersion $\frac{1}{17}$, ocular iii, 1000 : 1.

DESCRIPTION OF PLATES.

FIG. 1.—Illustrating micrococcus pyogenes; part forming zaoglœa, like a bunch of thickly clustered grapes, part single or in dumb-bells.

FIG. 2.—Illustrating the bacillus, in upper left corner, some micrococci.

FIG. 3.—Bacillus magnified, showing rounded ends.

FIG. 4.—Bacillus somewhat contracted by overheating, taking a rather oval shape. Micrococcus pyogenes, both as zaoglœa and single, and dumb-bells.

discussion at the forthcoming International Dermatological Congress, to be held in Paris. The object of the discussion on this subject is set forth thus:—"To classify various dermatoses—erythematobullous, or still more complex erythematous, pustular and bullous at the same time, i.e., multiform; such for example as the affections known under the name of pemphigus, with small bullæ; bullous hydroa, dermatitis herpetiformis, polymorphous dermatitis, herpes gestationis, &c., and what designation should be applied to them."

In a subject so important, and in the face of an impending discussion so international, it would be presumption to set forth one's own individual views, further than an occasional comment; therefore, on the hitherto attempted classifications, the following remarks will be almost wholly confined to a short *resumé* of the history of the subject, and the relation of the cases which have come under notice.

It is to the great dermatologist, Bazin, that the credit belongs of having first attempted to put into order the chaotic mass of unclassified diseases which partake sometimes of erythematous lesions, sometimes of pustular, sometimes of bullous, and occasionally of all three. To this class, he applied the long disused term "hydroa," making three headings—(1) *Hydroa Vacciniiforme*, (2) *Hydroa Vesiculeux*, (3) *Hydroa Bulleux*. The first of his varieties is not recognised by dermatologists as a pathological entity, on account of their inability to reconcile his description with any subsequently observed condition. The second, or at all events part of it—for Bazin seems to have described two distinct conditions—is really herpes iris, and it is thus to be classified in the same category with the exudative erythematata. The third variety is the only condition which is at present regarded as worthy of occupying a place in a separate group.

The next attempt at classification came from England, embodied in a paper, "A Clinical Study of Hydroa," by Tilbury Fox, published after his death by his brother, Dr. T. Colcott Fox (to whom we are indebted for the loan of the original papers), in the *American Archives of Dermatology*, Jan. 1880. Tilbury Fox excluded much of the material that Bazin included, and included much which he (Bazin) did not classify.

Fox, like others, is unable to recognise "*hydroa vacciniiforme*" as a separate variety, but he suspects that it is a modification of *hydroa bulleux*. In the place of *hydroa vesiculeux*, Fox substitutes two clinical conditions which he names respectively, *hydroa simplex* and *hydroa herpetiformis*.

Hydroa Simplex is to take the place of *hydroa vesiculeux*, after the cases corresponding to herpes iris have been eliminated. "Excluding then the herpes iris of Willan and Bateman, as a distinct clinical eruption, we hold that there is a residuum of Bazin's *hydroa vesiculeux*, as originally depicted, which deserves some name as that of *hydroa simplex*." To this residuum, he adds other vesicular eruptions, which are semi-herpetic in character, and which have not been classified—"these forms have a symmetrical distribution, develop acutely, are liable to recur and affect by preference the forearm and face." The individual lesion commences as a hard pruritic papule, on which a vesicle subsequently develops, which, in its typical condition, resembles a small lesion of *hydroa bulleux*. Probably, according to Dr. T. Colcott Fox, the first variety described by his brother, under the above heading, includes many cases of rapidly-formed acne lesions, and small urticarial eruptions.

Hydroa Herpetiformis is made to include the severer condition of a transition stage between *hydroa vesiculeux* and general herpetiform rash, the milder forms being included under the first heading, *Hydroa Simplex*. Briefly, Fox makes *hydroa simplex* include those cases with scattered lesions; *hydroa herpetiforme*, those with grouped lesions.

The third variety which Fox classifies under the term *Hydroa Pruriginosus*, corresponds to the pemphigus a petites bulles of French authors, the *hydroa bulleux* of Bazin, and the pemphigus pruriginosus of Willan and Bateman. This variety differs from the other two in its greater tendency to recurrence; the essential lesions are more bullous than vesicular, with no tendency to grouping, and the itching is more intense. To sum up his own views of the characteristics of each variety, Fox gives the following table:—

Hydroa Simplex . . .	General symptoms slight. Eruption consists of discrete vesicles. Eruptions often localised. Recurrence not marked. Duration short.
Hydroa Herpetiforme . . .	Tendency to groupage of vesicles, as in herpes, this being its general character. Recurrence more marked. Apt to be more chronic. General health much disturbed.
Hydroa Bulleux or Pruriginosus	Eruption rather bullous than vesicular. Recurrence of outbreaks marked. Wide distribution of eruption. Disease chronic. Itching intense. Pruriginous eruption supplants bullæ.

Now it is clear, that Fox would include much that, according to the present generally accepted definition of hydroa or dermatitis herpetiformis, ought to be left out. Thus, he includes many cases which his brother refers to acne and urticaria; and he considers his variety, hydroa herpetiforme, to belong to the same category of diseases as Hebra's impetigo herpetiformis. Duhring agrees with Fox in including this latter disease. Reasons for disagreeing with this view will be given later on.

The next authority in the field of classification is Duhring, of Philadelphia. His classification, with more or less trifling modification, is accepted by the majority of dermatologists. Duhring divides his cases, which he groups under the name "Dermatitis Herpetiformis," according to the predominant clinical features—whether erythema vesicles, bullæ, or pustules. Though in every case, more or less, multiformity is one of the characteristic points, yet he only applies the term "Multiform Dermatitis Herpetiformis" to those cases in which multiformity predominates, to the exclusion of any one other prominent feature. It is evident, too, that what may be a prominent feature one day, may change its aspect to that of another on the succeeding day, just as in the case of eczema, which at one time may be papular, at another vesicular, or pustular, and so forth.

Erythematous variety.—Erythema of urticarial type, may persist for some days or weeks, and then disappear; or vesicles or bullæ may develop on its surface.

Vesicular variety.—Most frequent, vesicles vary from pin's head to size of pea—generally disseminated over certain regions, but may be aggregated like herpes; itching very intense, often not relieved till vesicles are ruptured; probably same condition as herpes gestationis.

Bullous variety.—Blebs typical; often grouped in twos and threes in any position; small vesicles or pustules frequently form in the neighbourhood of the bullæ.

Pustular variety.—Pustules may be mixed with vesicles, vesico-pustules, or bullæ; occurs in men and women, latter not necessarily in parturient state.

It is in this class that Duhring would include impetigo herpetiformis of Hebra. Duhring in a paper, "Preliminary Notes on the Relation of Dermatitis Herpetiformis to Herpes Gestationis and other Similar Forms of Disease," read before the American Dermatological Association 1884, insists on the inclusion under his definition of several conditions, previously described by many authorities under

various names, as—the herpes circinatus bullosus of Wilson, pemphigus pruriginosus of Hardy, the herpes gestationis of Milton, Buckley, Thompson, Liveing, Cottle, Gale, and W. G. Smith ; also the pemphigus circinatus of Rayer, the herpes phlyctænoides of Gibert, the pemphigus aigu pruriginosus of Chausit, the pemphigus composé of Devergie, and the impetigo herpeticiformis of Hebra—all these, with the exception of the last named disease, may be included in one group ; but the disease described by Vienna authorities, under the name of impetigo herpeticiformis, should have no place whatever in this class. For, on very careful perusal of Duhring's published cases, and comparing them with the account given by Kaposi in his monograph (*Viertel Jahresschrift für Dermatologie und Syphilis*, Jan. 1887), it is impossible to recognise, in the cases of the former, a disease characterised by a preference for parturient women, intense constitutional disturbance, exclusively pustular character of lesions, which are never mixed with vesicles or bullæ, and have a preference for the genital regions, and intense fatality. Even supposing the local lesions in both diseases to be alike, it would be hardly justifiable to classify together two diseases, one of which is comparatively without constitutional symptoms, and is rarely fatal, the other attended by the most profound constitutional disturbance, and always (with one recorded exception) fatal ; any more than we can place in the same class simple aseptic purulent collections (simple abscesses) and pyæmic processes, whatever may be the morphological relation of the individual local lesions. The simile reminds us of the fact that, by many authorities, impetigo herpeticiformis is regarded as a pyæmic condition with cutaneous manifestations. Neumann called it herpes pyæmicus puerperales, and Auspitz metastatic pustulosis.

However, be their classification right or wrong, the gratitude of the profession will be ever sincere to those ardent workers in Dermatology, who have opened the chapters of classification to the protean mass, which it is to be hoped the delegates of the International Congress of 1889 will succeed in extricating from chaos.

Though typical cases are easily recognised and relegated to their class without difficulty, yet there is a vast number of borderland cases which puzzle even the most experienced. It is only by constantly bringing forward such cases as appear from time to time, that a collection of data can be obtained on which to build a substantive classification. It is with this object that the following notes are detailed, in hopes that, if any corresponding cases should

occur in the practice of any of the readers of the *Journal*, they may be made the subject of a publication.

Both the following cases have come under notice through the kindness of Dr. Stephen Mackenzie, of the London Hospital.

CASE 1.—T. C., æt. 40 years, a blacksmith, came under notice two months ago. He gave the following history :—

Two years ago he caught a severe cold, from sleeping between damp sheets. He had a shivering fit the same night, and next day "blisters" appeared on the face, lips, cheeks, and ears. Two days afterwards, the chest was covered with large red patches, which lasted three or four days. From this time to three months subsequently, when the condition reached its highest pitch of severity, successive crops of bullæ or erythematous patches, or both, followed in rapid succession. Then the condition diminished slightly in its severity; and though much better at some periods than others, he has never been free from the eruption. His general health has not suffered, with the exception of occasional depression of spirits which often precedes a fresh outcrop of eruption; he is well in himself.

The character of the eruption, as observed since patient has come under notice, consists of successive crops of bullæ filled with clear fluid; frequently, but not always, preceded by the manifestation of erythematous patches, varying in size from a split pea to a pear, or larger (corresponding to Duhring's bullous variety). At other times, the erythematous patches exist alone; they may be very evanescent, appearing and disappearing during the course of a morning, or they may persist for some days.

No part of the cutaneous surface is free from invasion, nor do the mucous membranes escape; and at present, there are a few small bullæ on the inner aspect of the lower lip, also, the remains of a ruptured bulla on the dorsum of the tongue. The conjunctival membrane has been the seat of an attack of bullous eruption, but it has left no defect behind as "essential shrinking of conjunctiva," as is occasionally seen in these cases and in ordinary pemphigus. The lesions sometimes make their appearance after slight external irritation; thus on one occasion, a hearty shake of the hand by a friend determined the outbreak of a crop of bullæ along the index finger. Pruritus is only occasionally present, and is never very marked.

The above case is quite typical, with the exception of the comparative absence of pruritis. At one time it corresponds with Duhring's erythematous, at another with his bullous, and at another with his multiform, variety

CASE II.—A. K., æt. 36 years, married.

Previous history.—Two years ago, a month after her confinement, patient noticed a small red patch, with pricking and burning sensations, on the back of her right heel; within a few hours, a water-blisther formed. The same day she noticed a similar condition on the index finger of her right hand. From this latter position, the erythematous patches and bullous formations spread to the back of hand, and then up the arm; and within a week, the whole body was involved; the subjective symptoms very marked, the burning tingling and itching being very intense. Patient has never been free from the disease since its onset. She had a very acute exacerbation three weeks after a miscarriage, which happened twelve months ago.

Present condition.—There are small erythematous patches, about the size of a threepenny piece, distinctly urticarial in type, scattered over every part of the cutaneous surface; these remain as such till their disappearance, or become the seat of crops of bullæ. The bullæ, which are for the most part small, never develop without preceding erythema. Pruritus is very marked and persistent; so intolerable is it that the skin is scratched all over, giving one the impression at first sight of a bad case of phthiriasis or scabies. The itching is most marked in the erythematous patches before they are fully developed.

Subjoined is a list of the public bequests of the late Mr. Francis Ormond:—Melbourne Ormond College, £40,000; Melbourne Leopold Working Men's College, £10,000; Melbourne Hospital, £5000; Melbourne Benevolent Asylum, £5000; Melbourne Protestant Orphan Asylum, £5000; Melbourne Deaf and Dumb Asylum, £5000; Melbourne Blind Asylum, £5000; Melbourne Sailors' Home, £5000; Melbourne Alfred Hospital, £5000; Melbourne Sick Children's Hospital, £5000; Geelong Hospital and Benevolent Asylum, £5000; Geelong Protestant Orphan Asylum, £5000; Ballarat Hospital, £5000; Ballarat Benevolent Asylum, £5000; St. George's Presbyterian Church, Geelong, £1000; Toorak Presbyterian Church, £1000; Skipton Presbyterian Church, £500; Gordon Technical College, Geelong, £1000; total, £113,500.

CASES OF PULMONARY HYDATIDS TREATED BY PUNCTURE—DEATHS. By J. DAVIES THOMAS, M.D.—Continued.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Caron and Soubeiran. <i>Gaz. Med. de Paris</i> , 1868. Cited also by Hearn.	M.	36	Right pleura; size of head of child aged 10 years.	Punctured at "point of election," two or three ozs. of limpid serosity escaped.	A violent attack of suffocative dyspnoea followed the puncture.	Death five days after operation, with symptoms of extreme venous congestion of the head, neck, and right arm.
2.	Dunn. <i>Aust. Med. Jour.</i> , 1863, p. 23.	M.	37	Large cavity in right lung, extending into thick edge of liver. Diaphragm absorbed.	Puncture with fine trochar; 72 ozs. of hydatid fluid removed. One month later patient returned with dyspnoea, pain in the side, &c. Second tapping—3 pints of pus and some hydatid shreds.	Two days after second operation, severe cough and copious expectoration of pus. Gradually sank.	Death four days after the second puncture.
3.	MacGillivray. <i>Aust. Med. Jour.</i> , 1867, p. 74.	M.	63	Large hydatid occupying the greater part of the right lung; "the only sound part of which was at the apex."	Puncture, with fine trochar; 52 ozs. of clear hydatid fluid; relief for a fortnight, then dyspnoea, cough, stinking expectoration. Exploratory puncture in several places brought away only a little blood.	Contents of cyst thick and viscid, and contained two or three moderate-sized daughter-cysts, and a very few small ones.	Died "rather suddenly," about a month after the first puncture.
4.	Frentzel. <i>Charité-Annalen</i> , 1876. Also, Virchow and Hirsch's <i>Jahresbericht</i> , Vol. xii., part I, p. 142.	—	—	In the left lung, a hydatid of the size of a man's head. In the right lung, a rather smaller one.	A puncture was made during life, but only 100 cubic centimetres of bloody serous (pleuritic?) fluid were obtained.	Diagnosis not made during life. The lung tissue in the neighbourhood of the cysts was in part breaking down by suppuration.	Death.
5.	Broadbent. <i>Lancet</i> , 1878, p. 575.	F.	19	Greater part of right lung.	Aspirator needle inserted, in order to relieve possible tension. Only a few drops of bloody fluid removed.	The symptoms closely simulated pneumo-thorax. No doubt the cyst had ruptured before puncture.	Death.

CASES OF PULMONARY HYDATIDS TREATED BY PUNCTURE—DEATHS.—CONTINUED.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
6.	Allen, Aust. Med. Jour., 1881, p. 198.	M.	56	Large hydatid in the lower lobe of the right lung; also, another in the liver, pressing on the duct of the gall bladder.	"Paracentesis performed in the lower axillary region, between the ninth and tenth ribs. Bloody fluid in small quantities evacuated."	The symptoms present were principally due to the liver cyst, &c., jaundice, oedema of legs, &c.	Death.
7.	Communicated to author by Dr. Lonsdale Holden, Hobart Hospital.	M.	23	Cavity in the middle of the right lung, of over a pint in capacity. It contained a large collapsed cyst, and a small one not ruptured.	Aspiratory puncture with a small needle; but it was doubtful whether any fluid at all was removed.	Patient died in about five minutes after puncture, apparently from fluid in the air-tracts of both lungs.	Death rapidly took place, with symptoms of asphyxia.
8.	Seen by the author in conjunction with Dr. Verco, Adelaide, 1884.	F.	20	Hydatid at apex of right lung.	Fine aspirator needle gave clear fluid, only about half an ounce allowed to escape, for it was intended to perform radical operation. About two months later, cyst had refilled; large trochar inserted in the outer part of the second interspace in front.	Symptoms of pneumo-thorax occurred after both operations. On last occasion fatal. No autopsy made.	Death.
9.	Dr. Shields, Aust. Med. Jour., 1884, p. 340. Under the care of Dr. Williams, in the Melbourne Hospital.	F.	23	Huge cyst, apparently of basic origin, occupying almost the entire right lung.	Exploratory puncture followed immediately by use of a trochar in the axillary line, about the sixth interspace. Three pints of clear hydatid fluid removed.	Cough; pyrexia, severe dyspnoea, &c., came on after the operation. Respiration became shallow and hurried, pulse weak, and the patient sank.	Death on the fifth day after puncture.
10.	Huppert, Echinococcus Pulmonum. Inaug. Dissert. Jena, 1875.	F.	29	In the lower lobe of the left lung a hydatid cyst of the size of the fist; it had ruptured into the pleura	Puncture, with Pravaz syringe; dyspnoea and vomiting immediately followed. A second tapping.	Post-mortem, pyo-pneumo-thorax.	Death.

CASES OF PULMONARY HYDATIDS TREATED BY PUNCTURE—DEATHS.—CONTINUED.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
11.	Cornil and Gibier. Cited in Virchow & Hirsch's Jahresbericht, 1884. Vol. II., p. 182.	F.	19	Deep in left lung.	Puncture gave exit to a litre of hydatid fluid.	At the autopsy, the sac still contained a litre of fluid and numerous daughter-cysts.	Death in 8 hours
12.	Hinkeldeyn. Cited in Medelung. Beiträge Mecklenburgische Ärzte zur Lehre von der Echinococcus-Krankheit. Stuttgart.	F.	40	Right lung and liver.	Puncture, perforation of the lung, hydatid into the pleura; puncture of pleura.	Diagnosis confirmed by an autopsy.	Death.
13.	Scholtz. Cited in Medelung. Op. cit. No. 16.	F.	20	Lung. Diagnosis of pleuritic effusion.	Puncture, with Pravaz syringe.	Under treatment for 11 months the cyst burst into the bronchial tubes, and some hundreds of cysts were expectorated; hectic fever, &c.	Died in fit of coughing (asphyxiation?)
14.	Schede. Cited in Medelung. Op. cit., p. 86.	F.	23	Cyst occupied the whole of the right chest in front, and reached from the apex behind to below the angle of the scapula.	An exploratory puncture caused at once severe cough, with much expectoration of thin fluid.	Death from suffocation in the course of a few minutes.	Death quickly.
15.	Communicated by Dr. Lonsdale Holden, of Hobart, 1884.	F.	39	Large hydatid in lower lobe of left lung; it had displaced the heart into a horizontal position. The cyst was not ruptured and contained clear fluid.	Two exploratory punctures in the left chest, at an interval of five or six days; no fluid came away on either occasion.	Patient died about half-an-hour after the second puncture.	Death.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION (ABDOMINAL SECTIONS)—DEATHS.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Schmidt. Cited by Kirschner. Inaug. Dissert., Berlin, 1879 : p. 5.	(?)	(?)	Liver.	Incision; immediate opening of sac; suture of liver wound to lips of parietal incision.	The result of this case is said by Kirschner not to be recorded with accuracy, but he states that it was reported to him to have ended fatally. [Apparently the earliest case operated on by this method].—J. D. T.	Death.
2.	Lindemann. Cited by Schlegelendal. Archiv. für Klinische Chirurgie, 1886.	F.	24	Left lobe of liver.	Lindemann's method; fifteen days later, pain in wound and malaise; evening pyrexia 104°. The wound contracted, and was dilated with dressing forceps, but no retention of pus in the sac; a focus of pus formed near the incision wound; cyst not evacuated of hydatid membranes; a second laparotomy performed, and a large cavity containing putrid pus and hydatids was opened.	Pyæmia; empyema; abscess of liver.	Death in about three months.
3.	Lindemann. Cited by Schlegelendal. Archiv. für Klinische Chirurgie, 1879.	M.	8	Liver.	Lindemann's operation.	Cause of death, pleurisy.	Death in twenty days.
4.	Knowsley Thornton. Med. Times and Gaz., 1883. Vol. I., p. 89.	F.	22	—	The cyst had been repeatedly punctured; incision; contents stinking and purulent; stitching to parietal wound; drainage.	At the time of operation, the patient was in a desperate condition, suffering from septicæmia.	Death from sepsis.
5.	Wallis. Cited in Virchow and Hirsch. Jahresbericht, 1887. Vol. II., p. 231.	F.	38	Numerous hydatids in the omentum, liver and spleen.	One cyst in the right iliac fossa enucleated, and was incised through the vagina; cured in two months. A year later, liver hydatid treated by incision.	Six months after the liver tumour was operated on, another on the left side of the abdomen was incised. P.-M.—Peritonitis and enteritis, ulcers.	Death from exhaustion.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION (ABDOMINAL SECTIONS)—DEATHS.—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
6.	Ignatiew. St. Petersburger Med. W. Schr. Cited in V. and H. Jahresbericht, 1886. Vol. II., p. 396.	(?)	(?)	Left lobe of liver.	Incision and stitching; the patient died during the operation.	The patient died from blocking of the right auricle, by a hydatid cyst, which appears to have entered the circulation through erosion of the vena cava inferior.	Death during the operation.
7.	Wieland. Cited in Virchow and Hirsch's Jahresbericht for 1886. Vol. II., p. 607.	(?)	(?)	In liver, spleen and transversalis fascia.	Lindemann's operation on two of the cysts.	At the autopsy, a large hydatid cyst was found in the lung.	Death on sixth day.
8.	Gardner. Proc. S. A. Br. of Brit. Med. Ass., Oct. 1886	F.	(?)	Liver.	Aspiratory puncture, followed by abdominal section.	"Progressed favourably for a time, and large quantities of cyst removed. Died four weeks after the operation, of septicaemia.	Death.
9.	Verco. Proc. S. A. Br. of the Brit. Med. Ass., Nov. 1886.	F.	8	Occupied whole of right lobe of liver, and was found at the autopsy to contain two small hydatid cysts.	Incision; immediate removal of mother-cyst; stitching; strict antiseptic treatment; injections of boric acid.	Copious discharge of bile; died on the fourth day from convulsions, with pyrexia. Post-mortem.—No peritonitis; the walls of the sac had partly become adherent to each other by exudation of lymph.	Death.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION (ABDOMINAL SECTIONS)—CURES.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Lindemann, 1871. Cited by Schlegelndal in Archiv für Klinische Chirurgie. Berlin, 1886.	F.	36	Liver: a swelling, the nature of which—whether abscess or hydatid—was disputed.	Lindemann's method.	The tumour threatened to burst, so it was incised and deep stitches were introduced at once.	Cured, two and a half months.
2.	Lindemann, 1878. Cited by Schlegelndal in Archiv für Klinische Chirurgie. Berlin, 1886.	M.	20	Liver.	Lindemann's method.	—	Cured, two months.
3.	Lindemann, 1878. Cited by Schlegelndal in Archiv für Klinische Chirurgie. Berlin, 1886.	F.	30	Left lobe of liver.	Lindemann's method.	—	Cured, three and a half months.
4.	Lindemann, 1880. Cited by Schlegelndal in Archiv für Klinische Chirurgie. Berlin, 1886.	F.	23	Liver.	Lindemann's method.	—	Cured, three and a half months.
5.	Lindemann, 1881. Cited by Schlegelndal in Archiv für Klinische Chirurgie. Berlin, 1886.	F.	30	Liver.	Lindemann's method.	—	Cured.
6.	Lindemann, 1886. Cited by Schlegelndal in Archiv für Klinische Chirurgie. Berlin, 1886.	F.	37	—	—	—	Cure, two months.
7.	Lindemann, 1885. Cited by Schlegelndal in Archiv für Klinische Chirurgie. Berlin, 1886.	—	—	—	—	Case in private practice.	Cured.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, JULY 3RD, 1889.

(Hall of the Society, 8 p.m.)

The President, Dr. BALLS-HEADLEY, occupied the chair, and there was a large attendance of members.

The minutes of the preceding meeting were read and confirmed.

Dr. Graham, of Richmond, proposed by the President, seconded by Dr. Neild, was then unanimously elected an Honorary Member of the Society. The following gentlemen were elected Ordinary Members of the Society:—E. J. Craig, M.B. Melb., of the Eye and Ear Hospital, proposed by Dr. Barrett, seconded by Dr. Balls-Headley; Arthur Lawrence, M.B. Edin., of Malvern, proposed by Dr. W. A. Wood, seconded by Dr. Barrett.

Three gentlemen were nominated for membership.

The President informed the Society that since the last meeting a deputation from the Society, and from the Victorian Branch of the British Medical Association, introduced by Dr. Le Fevre, M.L.C., had been received by the Premier, with reference to the taking up of a New Medical Bill by the Government. No answer had yet been received.

The President called upon Mr. J. P. Ryan to take the chair, and the following paper was then read:—

ACUTE PERITONITIS IN WOMEN.

By W. BALLS-HEADLEY, M.A., M.D. Cantab., F.R.C.P. Lond.
Hon. Physician to the Women's Hospital, Lecturer in Obstetrics and Diseases of Women to the University of Melbourne.

The importance of peritonitis is manifested by the number of women it annually carries off—in 1888 numbering 49 over 15 years of age, in a population of 1,019,700. This is but a small number in comparison with the number of cases, many of which become chronic, or may be returned under other causes of death. This number (49) is exclusive of deaths from—(1) accidents, (2) typhoid, (3) cancer, (4) diseases of the stomach, (5) liver disease, (6) enteritis, (7) Bright's disease, (8) puerperal fever and childbed, (9) tabes mesenterica, (10) tuberculosis, (11) ileus or obstruction of intestine, (12) hydatids, (13) nephritis, (14) hernia, (15) ulceration of the intestines, (16) ovarian disease, (17) diseases of uterus and

vagina, (18) intus-susception, (19) ascites, (20) stricture or strangulation of intestine (21) diseases of the spleen, (22) diseases of menstruation.

I desire to show that a large number of women die of peritonitis as a disease consequent on another and original disease, and that it may regarded as a symptom, rather than as the actual cause of death.

I would first ask—Does idiopathic peritonitis occur? I believe not, but it is impossible to prove a negative, and the onus of proof may well be expected from those who, in the post-mortem rooms, have the opportunity. For myself, I do not see them in life. Why should the peritoneum become inflamed under conditions exclusive of those enumerated at length above. It is not exposed to the close proximity of cold air as in the pleura, nor, except in the above-mentioned relations, does it occur in men or children. Why then in women? On the other hand, peritonitis is frequent in women. Sufficient causes for it may usually be found if carefully sought; its after-results, when not fatal, are constantly found in relation with other affections which nature has endeavoured to shut off by the products of this very inflammation.

In support that it is symptomatic, and the result of another disease, I would adduce a few cases, some, by operation, giving proof of the presence of primary affections; others, by examination, conveying the inference.

CASE 1.—Mrs. F. was sent to me by Dr. Herbert Embling, of Hawthorn. She was 26, married 5 years, had 1 child 4 years ago, and a premature confinement at $5\frac{1}{2}$ months 3 years ago, and had been an invalid since then, from an affection of the pelvic organs. When I saw her in Nov. 1888, she had a retroflexed uterus, which replaced with the sound, but always returned, and tenderness on either side of the fundus.

I tried a pessary, the application of various absorbents and columning, when, finding that on slight provocation the temperature rose slightly, I treated her by Weir Mitchell's system of massage, but she increased in weight but little. At its conclusion, the catamenia occurred, and she got great pain in the right iliac fossa with acute peritonitis; her temperature rose to 101° , and her pulse to 120. During the ensuing week, there was a steady rise to 105° , and the pulse to 140. Seeing no tendency to resolution, in February I performed abdominal section, and found in the right ovary a corpus luteum, of which the cortical substance formed a lid

a quarter of an inch in diameter, open and bent back, so that the secretion of this discharging cavity passed into the peritoneal cavity. Hence the peritonitis. Both ovaries being cystic, though small, I removed them, and she has made a complete recovery.

Probably from the original rupture of a cyst, a local peritonitis had occurred, producing the local adhesions about the site of the maturation of the graafian follicle, its surface membrane had been drawn back, and so retained by fresh inflammation from discharge.

CASE 2.—A. B., æt. 16, had ascites, without disease of heart, liver, or kidneys. Her temperature was persistently high, the night considerably above the morning; and for the last few days she vomited everything. There was no hymen; the uterus was congested, and to its left posterior was felt an enlargement. In May, on opening the abdomen, in the presence, and with the assistance, of my colleagues at the Women's Hospital, Drs. Fetherston, Rowan, and Burke, and the house surgeon, Dr. Anderson, the ascitic fluid escaped from an enclosed cavity, bounded above by the intestines, adherent at the level of the umbilicus, and below by a smooth layer of lymph, over the pelvic organs, so that they could not be distinguished. Knowing the situation of the enlargement, I separated the adhesions about it, and removed it; and presently, on the right side, the other Fallopian tube, much enlarged and inflamed, having the fimbriæ expanded stiffly. Flaky lymph shreds lay about the parts, or loose. She is making a fair recovery. The cavity is nearly occupied.

The absence of the hymen renders it possible that there had been gonorrhœal salpingitis, that the uterine ends of the tubes were thus impervious, and that pus escaped into the peritoneal cavity, whence the acute inflammation, with plastic and ascitic effusion, which would certainly have been fatal, for she was persistently vomiting before operation.

CASE 3.—Mrs. —, married 4 years, never pregnant, had long suffered from congestion of the uterus and ovaries, which at times had threatened her reason. After a considerable period of comparative health, she was suddenly seized with great pain in the right iliac region, where she was very tender. Her temperature was 103°, and her pulse from 120 to 140. The abdomen became greatly distended, and the temperature rose to 105° in a few days. Assisted by Drs. Le Fevre and Meyer, I opened the abdomen, and found that a vein in the right ovarian ligament was varicose, and

had burst—whence the peritonitis. Both ovaries were quite small, and were composed of a few cysts. Unhappily, she bore the operation badly, and sank from shock.

CASE 4.—Mrs. M., widow, aged 26 years, has had three children, and at intervals attacks of acute peritonitis, the last of which confined her to bed for six weeks.

After a malaise of two days in May, it being the catamenial period, which did not appear, she was suddenly seized with most acute pain in the left inguinal region, and in two hours, after a shivering fit, her temperature reached 105° , her pulse being 160. The tenderness in the left inguinal region, and heat of the lower abdomen to the hand, were intense. The uterus had an old lacerated cervix, the fundus was retroflexed, and to the left posterior was an enlarged flabby tube. Under treatment, her temperature rapidly subsided, and she became convalescent, the same conditions persisting internally.

I think there can be no doubt that either a graafian follicle or some cyst, containing an irritating matter or vein, or more probably a Fallopian tube, discharged into the peritoneal cavity, and hence the peritonitis.

CASE 5.—Mrs. S. had a swelling like a tube to the left of the uterus, and some usual left iliac pain. She was advised to rest for a few days; was suddenly seized with acute peritonitis with constant vomiting, and died in three days.

CASE 6.—In May, Dr. Cooke asked me to see a patient of his, a married lady with seven children. On returning from the theatre on a Friday night, she was suddenly seized with a violent shivering fit and acute pain in the lower abdomen. On Sunday morning her temperature was 103° , and her pulse 120, and she had acute peritonitis and diarrhoea during the day. In the evening her temperature was 101° , and her pulse 140. When I saw her on Monday at 7 p.m. she was moribund. To my feeling—about which Dr. Cooke doubted—there was a thickening to the left posterior of the uterus, which appeared to me to be an enlarged misplaced tube.

CASE 7.—In May also I saw a married lady, *set.* 45 years, a multipara, in consultation with Dr. Power, of St Kilda, who had for a considerable time been affected in the pelvic organs. A few days before, she had been seized with intense pain in the lower abdomen and acute peritonitis. At my visit, she had a feeble, flickering pulse, was very restless, and frequently vomiting. On the following day,

she was almost pulseless for hours, and her death was hourly expected. However, she presently rallied, and on the next morning was comfortable, with a fair pulse. We met in consultation at 3 p.m., when the pain had returned. Her pulse was 120, and the temperature 100°. There was an enlarged Fallopian tube at the left posterior, and we advised that if she were not greatly improved, abdominal section should be performed the next morning. This was declined, and she died of the peritonitis five days after.

It appears to me clear, that there was an escape from the distal end of the left Fallopian tube, which produced so much shock as almost to cause death; that the state of collapse depressed the peritonitis, so that she rallied; that there was then either a return in the vigor of the peritonitis, or possibly a fresh escape from the tube, and so a continuous progress till death ended the scene.

CASE 8.—In April, Dr. Hamilton, of Brunswick, asked me to see a patient of his. She was 23, and had been married four weeks. A week previously, without known cause, she was seized with acute peritonitis, so that in two days her temperature was 105°. I saw her at the end of a week, when she was moribund. Her abdomen was tense, the pulse imperceptible, and her temperature 108°.

In the absence of any known cause for this violent inflammation, it must be assumed that something burst internally.

CASE 9.—A single lady of about 40 years, had for years suffered from a congested uterus, tender ovaries, and dysmenorrhœa, and was a confirmed invalid, rarely being able to go out. There was no sense of defined enlargement. Without apparent cause, she was one night seized with intense pain. The pulse could scarcely be felt, and was slow; the temperature 97°, the abdomen tense, and exceedingly painful. Under stimulants and opium, she gradually recovered from the collapse, and the peritonitis gradually subsided.

At a later date, I opened the abdomen, when the same collapse occurred, so that I had to hold her head downwards to prevent her death. The pelvic organs were densely bound down, and both ovaries were cystic under the adhesions. These were broken up and drained.

The collapse was no doubt due to the rupture of one of these cysts into the peritoneal cavity; but the fluid so effused, while sufficient to cause peritonitis and subsequent adhesions was not of

the character that raises the temperature; or she had the peculiarity occasionally found, of a depressed heart in peritonitis.

I do not care to give more cases, as they are all very similar to one or other of the above.

In the case of the existence of tumours, whether ovarian, fibroid, or other, it is certain that pressure may produce an adhesive peritonitis, as, *e.g.*, in the adhesions of the mesentery. I have seen other cases of acute peritonitis induced by twisted ovarian pedicles, ruptured varicose veins about the pedicle, ruptured small cysts about the base of the tumour, and of the other ovary, and by bruising of tumours caused by rough rides. Moreover, any of the conditions mentioned above capable of producing peritonitis, in the absence of a special tumour, may be equally present with it.

Specially, too, is it necessary to mention the rupture of the sac in extra-uterine foetation. Some cases of this I could mention, having, indeed, one now under my care. Yet the conditions in this respect do not materially differ from the rest which are specially the subject of this paper, unless it be that in addition to the customary shock, there is the large loss of blood and collapse, which the more emphasises the necessity of rapid thought and vigorous treatment by usually the only useful means, abdominal section.

In these foregoing quoted cases, there was in each an absence of conditions which may produce peritonitis, other than some disease of the ovaries or tubes, which, in the majority, was proved to exist, in the natural progress of which diseases, rupture, and in a certain number into the peritoneal cavity, is the result found to occur. Such rupture introduces a fluid into the peritoneal cavity, abnormal and antipathetic to its habit, with the result of a diseased action, which is inflammatory, and which we call peritonitis.

Nor can it be asserted that such diseased states of the pelvic organs are uncommon. It is unnecessary for me to detail a large number of cases in which such disease is present, but I can adduce the statement that to my knowledge there are numbers of women going about in comparative health having such disease of the ovaries or tubes, in whom at any moment such rupture or effusion may occur. In some of these, operation has been ineffectually urged. Some have been watched till the fluids have discharged themselves in one direction or another. In some, an accumulation of fluid occurs periodically, and under the influence of its pressure,

discharge takes place into the intestines or uterus. In some, as in the above detailed cases, the effusion has been into the peritoneal cavity, and peritonitis has resulted. The violence of this peritonitis is in proportion to the quality and quantity of fluid effused. No doubt, a small quantity of acrid or foetid pus from a gonorrhœal or septic tube may produce a most violent, and perhaps fatal inflammation; when a mucus, scarcely become purulent, it may have a less power, and recovery may result. Also, where the end is not too rapid, peritonitic lymph may encyst the effused irritant.

The following are three cases in which collections of pus in the tubes discharged themselves satisfactorily; yet the direction in the individual case is a matter of chance, being in that of least resistance, of which one cannot be sure till the thing is over:—

In February I saw a patient in consultation with Dr. Woinarski, of Ballarat. She had had an acute inflammatory attack, in which her temperature exceeded 103° , when she was very dangerously ill. Presently, a considerable discharge of purulent fluid escaped from the os uteri, and she gradually improved. When I saw her in consultation with Dr. Woinarski, the fundus was retroflexed, and when replaced in Sims' position by the sound, it returned to its retroflexed position, which showed the existence of adhesions. To the left posterior was a thickened Fallopian tube. The gentle introduction of an air pad pessary in a few hours raised the temperature to 101° .

It is evident that here had been inflammation and an accumulation of pus in the Fallopian tube, with pelvic peritonitis, as shown by the subsequent adhesions which drew the uterus back into retroflexion. Both ends of the tube must have been occluded, and it was uncertain whether the pus would escape into the intestine or bladder, the peritoneal cavity or uterus. Fortunately, the least resistance was through the uterine end of the tube. It is not improbable some fluid had previously escaped at the distal end, whence the peritonitis.

Mrs. S. had one child, and, some years after, a large abscess, probably of the right tube, which was opened by the vagina and abdominal wall, and an old everted lacerated cervix. Of late she has had an enlarged tube of the left side, and has frequently been confined to her bed for weeks. The left tube became dilated to the size of a sausage without much increase of temperature, but with a good deal of pain. While deciding as to operative measures, it fortunately discharged by the uterine end.

In a similar case the conditions were identical, except that the discharge made its way through the intestine, as on former occasions.

Instances in which the pus opened into the peritoneal cavity are, in my opinion, the three fatal cases mentioned earlier, in which no operation was performed.

Cases which have yet to indicate the direction of least resistance are the following :—

Mrs. H., aged 26, has had one child seven years ago, and now complains of weakness and leucorrhœa. Her regular weight seven years ago was 9 stone, she is now 7 stone $3\frac{1}{2}$ lbs. She has some laceration, with everted granular tissue. The uterus is heavy, $3\frac{1}{2}$ inches in length, and posterior to it is a thickening as of an enlarged ovary or tube. This gradually increased in size till it formed half a circle posterior to and at the sides of the uterus, of which the right end felt like a non-fluctuating ovary, while the left fluctuated readily. Operation was declined, and the tumour will burst in one or another direction, that of least resistance.

Mrs. W., aged 31, married 14 months, never pregnant; has always had very great pain at the catamenia, and been frequently in bed then; for the last 10 years has had pains in the left iliac region, especially if she walked.

Now complains that she is never well; has pain and thinks a lump in the left iliac region, pain across the lower back and at the nape of the neck, much leucorrhœa, and is nervous and weak; is sallow. The os is congested and points forwards, and the opening gapes; the fundus is retroverted. Posterior to the uterus, low down, is a dense fluctuating body, apparently the left tube, and the ovary is adherent to the uterus, and both are very tender.

This woman has evidently had a disease which has produced misplacement of the uterus and pelvic peritonitis, and the left tube is apparently distended and may burst at any time, and in the direction where the resistance is least.

The prognosis of such peritonitis is dependent on the quantity and quality of fluid escaped into the peritoneal cavity, of which we can seldom be exact judges, and our guide must rather be the condition of the patient and the rate of progress of the disease. In one case mentioned, death occurred in sixty hours, and this may well be taken as a lesson of the danger of delay. In another,

though in two hours the temperature was 105° and the pulse almost running, yet the subsidence was rapid, probably the first from shock, the second from the comparatively mild nature of the irritant; yet there is no certainty that a future effusion may not be more septic, with a rapidly fatal result. Nor is there any certainty that discharges may not continue to flow into the peritoneal cavity from the burst structures, as in the case of other instances mentioned. Thus the prognosis must be of the most guarded, and always with the most vigilant view of the resources of art in the direction of abdominal section.

The treatment of such acute peritonitis will first be to diminish the shock, which will include absolute rest, the application of heat to the extremities; of heat with moisture, as fomentations or poultices to the abdomen; and the diminution of pain, as by opium in some form. The rectum may presently be emptied by bland enemata, and the conditions carefully and most gently investigated. Only the lightest diet may be given.

And now comes the most difficult problem—Is abdominal section desirable? Is it essential? and, if so, at what moment? Here are questions that can only be decided by the facts of each individual case. In many, it may be concluded that the patient is on the horns of a dilemma. If left alone, death is certain. If operated upon, it is under difficult conditions, and, particularly if there has been undue delay, death may occur; but the only chance of recovery lies in operation, and such chances have been successfully availed of in some cases described above, and in many others which to describe would too much lengthen this paper, and not add materially to its force.

In conclusion, I would say that the rational inference is, that a large proportion of the forty-nine people, more or less, who annually die of these forms of acute peritonitis, do not take advantage of the reasonable expectation of cure available to them.

Dr. LE FEVRE said that he surely must have misunderstood Dr. Balls-Headley if he had said that peritonitis was to be looked on rather as a symptom than as a disease. Though undoubtedly produced by the causes mentioned, it was hard to see why the peritoneum should not become idiopathically inflamed, as well as any other serous membrane, as synovitis from cold, meningitis from low conditions, tubercle, &c. He thought that cold striking through the vagina or abdominal surface might be the cause of

peritonitis. With regard to treatment, it was certainly desirable to operate early. He had seen a number of Dr. Balls-Headley's cases, and where the operation had been performed early, the result had been most satisfactory.

Dr. DUNCAN (of Kyneton) was inclined to think that it was correct to say that peritonitis was a symptom rather than a disease. On two occasions he had operated on men suffering from peritonitis of obscure origin, and had found that both had resulted from a diseased vermiform appendix. He had seen a few cases similar to those related by Dr. Balls-Headley, and he was in favour of early operation. The disease was such a very fatal one, that its treatment by laparotomy was rapidly coming to the front.

Dr. HOOPER said that the statement made by Dr. Balls-Headley, that peritonitis was really only a symptom, was not generally accepted by the profession. He himself had never seen an idiopathic case, and did not see why a chill should cause peritonitis in any woman, any more than in a puerperal woman. Cases of peritonitis, with effusion, get well without operation. What happens in such cases? Further, why should rupture of a vein in one case cause fatal peritonitis, whilst in another there is no peritonitis? In other cases there is hæmorrhage followed by suppuration, and yet no rise of temperature. All these matters are very important in remember, when advising a patient to submit to a dangerous operation.

Dr. J. P. RYAN thought the term symptom scarcely applicable to such an important disease as peritonitis. There probably were occasional idiopathic cases from causes of which we were unaware. The question of performing laparotomy was a very important one, and the operation added little or nothing to the danger, whilst it might save the patient. Peritonitis in men and children should be treated by early laparotomy.

Dr. BALLS-HEADLEY, in reply, stated that he still regarded peritonitis as symptomatic. If it were due to cold, why should women, who are not exposed as men are, be so prone to it? Treves, of London, was of opinion that peritonitis was generally "mechanical." In performing laparotomy, he advocated absolute cleanliness, but did not use the spray, nor introduce into the abdominal cavity any chemical. He believed that the explanation of those cases where the temperature did not rise, although there was suppuration, was that there was no tension present.

EXHIBITS.

Dr. J. P. RYAN then exhibited several ophthalmic cases.

Dr. BARRETT exhibited :—

(1) A successful case of cataract extraction. Man, aged 61. An upward preliminary iridectomy had been performed, and the cataract, when mature, had been extracted in the ordinary way eight weeks since. Capsule divided with cystitome. Notwithstanding all care, portions of lens were left adherent to the posterior capsule. Recovery effected without complication. Vision = $\frac{6}{80}$, soft lens absorbing.

(2) Successful case of cataract extraction. Man; mature cataract. The operation performed in exactly the same way as in (1), fourteen days ago. Some masses of soft lens could not be removed by palpation, and were consequently removed by irrigation. A considerable quantity of soft lens remained adherent to the posterior capsule, and is now absorbing. Recovery excellent.

(3) Case of successful cataract extraction. Man, aged 70; mature cataract. During the performance of a preliminary iridectomy, the capsule of the lens burst, and a small quantity of the soft lens escaped. The wound was enlarged with scissors, and the lens extracted, resort being made to irrigation to remove a portion of it. Excellent recovery. Vision = $\frac{6}{18}$.

(4) Case of successful cataract extraction. Man, aged 45; mature cataract. Extraction performed about three weeks after preliminary upper iridectomy. There was much bleeding, and owing to the presence of the blood, two pieces of lens (one of which was about twice the size of a pin's head) slipped into the lower part of the anterior chamber, and were unobserved at the time of operation. In two days a violent iritis commenced, and the pieces of lens became encapsuled with lymph, and did not absorb in the least. On the 14th day, the pupil was being closed by bands of lymph, chemosis was increasing, and the pain was great. An incision was made into the lower part of the anterior chamber, a pair of iris forceps introduced, and after many unsuccessful attempts, the pieces of lens were forcibly torn from their attachments and removed together, with a small piece of iris. A day or two after the operation the iritis lessened, and the patient is now nearly convalescent. The pupil is fairly active to light, though somewhat filled with very fine threads of lymph. Vision = $\frac{6}{24}$, which may possibly be improved by operation later.

Here it seems certain, that the determination to treat the case on ordinary surgical principles, and to remove foreign bodies at any cost, was instrumental in saving this eye.

(5) Case of successful cataract extraction. Woman, aged 33. Had congenital cataract in left eye ; removed by needling some years ago. Iris apparently absent. Either the posterior capsule, or the hyaloid is dark and opaque, except at one small opening in the middle, and vision is imperfect.

In the right eye there is a mature cataract, and apparently no iris. The cataract was removed through an upward section, and some soft lens removed by irrigation. The patient made an excellent recovery.

Dr. BARRETT explained that the apparatus he used for irrigating was simply a Teale's suction curette, with a piece of india-rubber tubing and a glass syringe attached. He used warm water. He practised irrigation and palpation alternately, and had not as yet found the slightest reaction follow this proceeding.

Dr. DUNCAN pointed out that the ordinary operation for cataract presupposed the maturity of the cataract. McKeown had devised this proceeding of removing soft lens by irrigation, and claimed that by the use of it, lens matter could be removed where the cataract was immature. The universal use of this method would imply the practise of operations in immature cases. In the cases Dr. Barrett had exhibited, the result had been excellent, but the method is still on its trial, and further evidence is required. Iridectomy occupies at present an ambiguous position with regard to the cataract operation. Personally, he always performed a preliminary iridectomy as long as possible before extracting, and he thought that it is probable that iridectomy has lost favour because it has been performed at the time of and not antecedent to, the extraction. He practised at times artificial maturation.

Dr. BARRETT, in reply, said that he had hitherto only operated on cases which were mature, or nearly so, and that he agreed with Dr. Duncan thoroughly on the subject of preliminary iridectomy. He did not think that the method of irrigation was applicable to a majority of cases ; but in some cases in which soft lens was present, and could not be removed by the ordinary methods, it was of great service, and appeared to be harmless.

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MEETING.

Wednesday, June 26th, 1889.

(Hall of the Medical Society, 8 p.m.)

Dr. LE FEVRE in the chair. There was a good attendance of members.

Dr. LE FEVRE showed a female child, aged 2 months, suffering from a small spina bifida in the sacral region.

The following paper was then read :—

NOTES OF AN UNCOMMON COMPLICATION OF LABOUR.

By FELIX MEYER, M.B., B.S.

Physician to the Midwifery Department, Women's Hospital, Melbourne.

On the morning of the 15th May, I was summoned to the Women's Hospital to see a woman who had been admitted in labour soon after midnight, and about the condition of whose os uteri the resident medical officer was doubtful.

Patient was a healthy primipara of 28, 8½ months pregnant, and already some 24 hours in labour. She had been sent in by an old and experienced accoucheur, who had failed to discover the os. She had been the subject of a metrotomy five years previously.

I found the patient in labour, with strong bearing-down pains. Examining with the forefinger under the bed clothes, the head was felt low in the vagina, an inch from the vulva, with the cervix stretched over it, but no trace of an os. With each pain, the head with its cervical sheath were driven downwards.

Thinking I had been careless in my examination chloroform was administered, and I again passed the forefinger to the vagina, and felt a soft os-like canal which ran under the pubes, admitting the finger easily to its fullest extent. The head and its thick surrounding sac was felt posterior to the finger. I suspected I had passed the finger into the urethra, and introduced a bougie along the canal; urine followed. Inspection at once revealed a bluish, congested, dilated urethral orifice, into which my finger had easily passed it having been previously enlarged by outside examination.

Again examining the surface of the head, I found at its lowest and most posterior pole a slight depression, which under pressure admitted the tip of the finger. In a few minutes I had dilated this to the size of a shilling, and I now had a thin cervical margin, which I easily enlarged by slowly sweeping the finger round and round until its patency allowed the application of Simpson's forceps. The rim of the os was excessively thin, but with care and complete anæsthesia, delivery was effected without any laceration of cervix or perinæum at 2 a.m. of a healthy female child.

The patient made a good recovery with a normal temperature throughout, leaving the hospital on the 12th day. The only complication was some hæmorrhage from the ill-treated urethra, which was checked with a tampon of cotton wool saturated with hazeline.

Remarks.—Closure of the os, almost complete, through fibrous or cicatricial tissue is not uncommon. On several occasions I have had to resort to the bistoury to allow the passage of the head, and in one case, where its progress was prevented by a firm band stretched across the diminutive os, I found the cervix had ruptured an inch and a half from the os, and the head was being driven through, enlarging the rupture in an upward direction. Here again the slitting up of the portion of the cervix, between the os and the lower margin of the rupture, prevented a serious result.

The obvious comment on this case, is that an examination of inspection would have shown the patent urethra, and saved it from further unnatural treatment.

Dr. LE FEVRE had had several cases of labour in women on whom Emmet's operation had been performed, and had not observed any difficulty in the dilatation of the os, not so much as in a primipara. He had met with one case where the os presented an obstacle, being fibroid and cicatrized. This woman was 55 years of age, and had been treated for extensive ulceration. He had to divide the cicatricial tissue with a bistoury, and labour then proceeded.

Dr. MAUDSLEY asked if the patient had suffered from incontinence of urine or cystitis.

Dr. MEYER in reply, said the patient had no trouble whatsoever with the bladder.

The following paper was then read :—

ON A CASE OF INTESTINAL OBSTRUCTION BY
MECKEL'S DIVERTICULUM.

By C. RYAN, M.B. Edin. et Melb., Ch. M. Edin.

On Sunday evening, 27th January, I was telephoned to go at once to the Melbourne Hospital, to see a young man, a plasterer, æt. 25 years, who had just been admitted, suffering from intestinal obstruction. He had a good family history, but was not over robust himself. He had never suffered any abdominal pain before, never had typhlitis or peritonitis, bowels were usually free, never had been constipated. He gave the following history of himself :—Was feeling in his ordinary state of health until last Thursday, when he felt sick all day and not inclined to eat. This feeling of sickness gradually increased, and on Friday morning early he was awakened by a dull, heavy pain, commencing at first in the upper part of his abdomen, and afterwards extending down towards the cæcum. He had a motion on Thursday, and a slight one on Friday morning. During the day the pain became constant and intense, and about nine o'clock he began to vomit a sweetish fluid. He was unable to eat anything, and after taking fluids, they were at once rejected. The pain and vomiting increased on the Saturday, and he felt himself becoming weaker and weaker. He called in medical aid, and was put on opium; and enemata were on several occasions administered, but without result. As his case was considered to be hopeless, and he was told that nothing more could be done for him, he was advised to go to the Hospital. On admission, he was in a very prostrate condition. His hands and feet were cold and clammy, his face drawn with pain, his features pinched, with dark rims round his eyes; pulse small and thready, about 120. His abdomen was slightly tympanitic and tender on pressure, especially about the neighbourhood of the umbilicus, around which there was a reddish blush, and all his symptoms pointed to acute strangulation as the cause of the obstruction.

I decided to operate at once, although the chances of success seemed very slight. Having explained everything to the patient, whose intelligence was keen, I obtained his consent. Chloroform having been administered, an incision about four inches in length was made in the median line below the umbilicus, and the peritoneal cavity was exposed. Just to the right of my incision,

and attached to the under surface of the umbilicus, I noticed what appeared to me to be an extremely attenuated portion of intestine forming a band, and on tracing this downwards I found that it was twisted on itself, and in the twist was ensnared about two feet of small intestine. The lower end of this band was attached to the ileum, about two feet above the ileo-cæcal valve. I had no idea as to what it was, never having heard of Meckel's diverticulum. I could only imagine that it was some abnormal diverticulum of the bowel. At first I thought that it was an elongated vermiform appendix, the free end of which had become adherent to the parietal peritoneum in the neighbourhood of the umbilicus. Ensnared in this loop, and acutely strangulated and lying in the pelvic cavity, was about two feet of ileum, much congested, of a purplish colour, and distended with gas. By making traction on the strangulating band, and relieving the pressure with my finger, I was able with a little difficulty to draw out the intestine from the top, in doing so its peritoneal coat split in two or three places. The gut below the strangulation was more or less collapsed, but that above was much congested and distended—showing signs of acute peritonitis. The abdomen was carefully sponged with warm boracic lotion, and the external wound was closed with deep sutures and superficial horsehair sutures, dressed with iodoform, and perchloride gauze. An injection of a quarter of a grain of morphia was administered, with hot bottles to the feet, and warm blankets, &c.

January 28, 6 a.m.—Patient slept fairly well, no pain or vomiting. 9 a.m.—Has vomited some greenish fluid. Temp. 98·4°, pulse very rapid and weak, tongue moist and coated. Champagne was ordered, but he sank, and died at one o'clock.

The case is worth while putting on record, because it helps to familiarise us with the symptoms caused by acute strangulation. There is little doubt that if the man had been sent into the hospital 24 hours earlier, and had been operated on before peritonitis was set up, that he would have had a very fair chance of getting well. Of all cases for operation, those caused by bands (peritoneal) or appendages, are the most likely to be followed by a cure if diagnosed and operated on early. In this case, there was not much difficulty in recognising the lesion as most probably due to acute strangulation; there was the man's age, which would be against vololus, as also the absence of any history of prior constipation. Then again, the sudden nature of the attack, the

character of the pain being constant, and not to any extent paroxysmal. Then again, the absence of tension and meteorism, which were only slight and due to the peritonitis being set up. Then persistence of the vomiting, the marked features of the collapse, and the complete constipation, all these pointed more to its being due to acute strangulation by bands than anything else. How often is it that we are called upon to operate in these cases when the patient is moribund. A careful consideration of the different causes of obstruction, with the different symptoms accompanying each, may help us to some extent in saving lives, which are every day being lost.

Autopsy.—The coils of small intestines were distended, and adherent to one another, and to the parietal peritoneum. About 2 feet above the ileo-cæcal valve a fleshy-looking band could be seen proceeding from the intestine. It extended upwards to the umbilicus, to which it was attached, forming a cul-de-sac there. It lay against the parietal peritoneum, but was not adherent to it. The inner surface of the diverticulum was lined with mucous membrane continuous with that of the intestine. About three-quarters of an inch from its junction with the intestine a whitish line of commencing sloughing could be seen on the peritoneal surface of the diverticulum; it was also apparent on the mucous surface, though not so distinct. There was a similar mark on the peritoneal surface of the intestine, about one inch from the diverticulum, while the mucous membrane opposite had given way. The intestine for two or three inches above the diverticulum was swollen and blackish, but not gangrenous. The mucous membrane surrounding the entrance of the diverticulum into the intestine was deeply congested, and of a purplish colour. The intestine had evidently been caught in a loop of the diverticulum, and the pressure had caused strangulation, with subsequent sloughing of the coats of both.

Mr. RUDALL referred to the danger of Meckel's diverticulum, to its being a cause of acute strangulation, and occasionally of congenital fœcal fistula. He referred to the importance, in cases of intestinal obstruction, of early laparotomy, when the symptoms pointed to acute strangulation.

Dr. MEYER referred to a case of menstruation from the umbilicus. He thought it probable that the sinus present in that case was the remains of Meckel's diverticulum.

Dr. SPRINGTHORPE had seen cases of intestinal obstruction get well without laparotomy, and was inclined in doubtful cases to wait.

Dr. HENRY considered that what was desired was more exact rules for diagnosis.

Mr. F. BIRD was of opinion that acute strangulation was indicated when there was great collapse, deficient secretion of urine, complete intestinal obstruction and vomiting, the symptoms coming on early, and these were cases for early exploratory laparotomy.

Dr. RYAN replied.

The following paper was then read :—

**NOTES ON THE OCCURRENCE OF A RIGOR PYREXIA
AND ERYTHEMA ALONG THE DISTRIBUTION OF
A NERVE, THE RESULT OF TRAUMATIC IRRITATION.**

By FRED D. BIRD, M.S.

This case, the notes of which I will read, is, by itself, only curious, but the record of the phenomena which occurred may be useful when taken in conjunction with other facts relating to irritation of the nervous system, *e.g.*, the reflection of peripheral impressions and also vasomotor disturbances. At Dr. Maudsley's invitation, I removed an enlarged and tender gland from the left groin of a young male. It was the large one which lies more superficial than the others, and proved to be riddled with minute abscess-points. In putting in the sutures, a deep silk one was adjusted in the upper part of the wound, in order to fill up the gap left. Shortly after this was tied, the patient, under the influence of chloroform, was suddenly seized with a well-marked rigor which lasted about eight minutes ; the anæsthetic was stopped, and after an interval the suturing was finished and a drainage tube inserted. The patient looked blue and cold for the rest of the afternoon. It may be stated that he had never had ague. The next day he looked as if he were in for some serious illness. Dr. Maudsley's opinion inclined to some form of blood-poison, and mine to pneumonia. The temperature was 104° Fah. The tongue furred and very foul. No recurrence of the rigor. There was a slight cough and some headache. The wound presented nothing remarkable. There was some blood-stained discharge, no swelling, but a general diffused erythematous redness over the front of the belly and flank on the left side, extending over the crest of the ilium. There was no pain. The stitches were all

removed, and the wound dressed with wet boracic wool. Five grs. of calomel and an effervescing mixture were given, and further developments anxiously awaited. The following day the patient was much better. Temp. 100°. Tongue cleaner. No cough. The wound looked healthy, and the formerly diffused redness had dwindled down to two lines exactly marking the course of the two branches of the ilio-hypogastric nerve, the terminal trunk of whose hypogastric branch I must have included in my deep suture. The way in which eruptions follow the course of cutaneous nerves is well known, as is the shock seen on the division of a large nerve or the spermatic cord, but the production of a rigor and a rash in the manner just related, I do not remember before. Granting that the constriction of the nerve by the suture was the cause of the symptoms, two questions arise: How is it that similar symptoms do not occur more frequently, for nerves of a similar character are constantly being surgically nipped (as in the operation of varicose veins); and again, what would have been the effect if the constriction had not been removed? After a good deal of reflection, the answer to the first of these does not occur to me; but with regard to the second, I firmly believe that great danger of tetanus would have ensued on the retention of the offending ligature.

Dr. HENRY said that he had conducted some original researches on the electro-motor power of nerves, which, in his opinion, should sufficiently explain the rationale of the symptoms which the author of the paper had just described. Every nerve possesses a certain amount of electro-motive power. An electric current exists which may be excited or reduced. The electro-motor power of a large nerve is equal to 0.02 of a Daniell's cell. If the peripheral end of a nerve remains in contact with its muscular terminus, any excitable cause, either mechanical or chemical will increase the nerve impulse, and be visible in the muscle by sensations or muscular contractions, which may be so strong that the muscle may exhibit a condition of spasmodic contraction or tetanus. The change that takes place in a nerve must depend on the exciting cause. In the nerve fibre, as in the muscle, a certain molecular movement takes place, and if it is a motor nerve attached to its muscle, this irritation is seen in the muscle as soon as the nerve is excited. The nerve fibre may be irritated at any part, the effect is the same. Any mechanical effect, such as cutting, pressing or tearing will intensify the motor power in the nerve, and

cause the muscle to react. If the nerve is dipped into certain chemical solutions, a similar condition is observed. The most sensitive of all instruments that exist for the measurement of nerve force is probably Lippmann's capillary electrometer.

In one experiment, a nerve which had been completely severed at both ends from its attachments, and placed on the nonpolarisable electrodes connected with the instrument, the mercurial horizon showed a difference of about 40 degrees. After a bath of 10 minutes in glycerine, this fell to 13, and after treatment in a weak salt solution, the electro-motor power rose again to 35 degrees. A further series of experiments he had conducted, by placing the nerve on the electrodes, and drawing the loop of a thread tight, and allowing the physical tetanomotor to play on one part of the nerve, while the other part rested in contact with both electrodes. In each instance, a very great difference in the mercurial column was visible, equivalent to what would have been tetanus in the muscle had it been attached. In the normal and quiet stage of the nerve the electromotor power, in his experiment, was 16 degrees, but when excited it showed 26 degrees, a fact which goes to prove that tetanus is but an increase in electro-motor force.

The bearing of these experiments on Dr. Bird's paper would tend to illustrate the belief, that the suture which embraced the nerve was the cause of eliciting an irritation in the nerve, and so inducing increased electro-motor disturbance which reflected, by conveying exciting impulses to different centres—the interesting and uncommon symptoms from which the patient suffered.

Dr. MEYER referred to a case of tetanus which came on 19 days after the patient had run a thistle in his hand.

Dr. LE FEVRE alluded to the various conditions under which rigors occurred, not necessarily febrile conditions. He referred to the case of a lady who suffered from the most severe rigors in any attempt at sexual intercourse. The lady suffered from piles, and at the operation he had the greatest difficulty, on account of the recurrence of these rigors whenever the piles were touched. When the piles were cured, the rigors never occurred.

Mr. BIRD replied.

EXHIBITS.

The following pathological specimens were exhibited :—

Dr. RYAN : Meckel's Diverticulum.

Dr. SPRINGTHORPE : Aneurism of the Aorta.

Dr. MAUDSLEY : Colloid Cancer of the Stomach.

Australian Medical Journal.

JULY 15TH, 1889.

THE NEW HEALTH BILL.

The Bill "to create a Department of Public Health and further amend the law relating to Public Health," is one that demands some attention from the medical profession. It has already been pretty freely discussed, and in some instances the criticism has been decidedly hostile to the Bill, and the denunciation of its main proposals earnest and even bitter. This was to be expected, since most of these proposals bear on some primary principles of Government which always excite discussion. Admitting that the object of all good Government and Legislation is to promote the well-being of all classes of the community, the question continually arises in one form or another—Is this Government to be by the people as well as for the people—Representative Government as it is called—or is it to be Government, none the less for the people, by experts, or what some call bureaucratic Government. With questions of this kind it is not within our province to deal, but it may be pointed out that the proposal of the Bill is really a sort of compromise, a combination of the two systems. The proposed Minister of Health is representative, elected by the people, and responsible to the peoples' representatives in Parliament. The head of the Department and the Board of Health constitute the expert element, and are bureaucratic. Consequently, though somewhat amusing, it is not surprising to find that, on the one hand, critics like Mr. Service (who has had no little experience of municipal affairs) object to the appointment of a Minister, on the ground that such an official would be too pliable to the influences that might be brought to bear upon him by the municipalities; while, on the other hand, critics like Mr. Fitzgibbon contend that the Minister would be too much under the thumb of the permanent head, and consequently, municipal influence and *laissez faire* methods would no longer be in the ascendant. The Town Clerk of

Melbourne, however, seemed to narrow down the whole matter to a personal difference between himself and the President of the Central Board, so much so, indeed, as to very much discount any weight his opinion on the subject might otherwise have.

Apart, however, from all theoretical principles of Government, we have to face the fact that, as is conclusively shown in the Report of the Sanitary Commission, the metropolis is in a condition of insanitation disgraceful to the community, and especially to the existing Health authorities. Some change in control and regulation of matters affecting Public Health is therefore imperative. Notwithstanding the complaint on the part of the municipalities, that the Bill is an insult to them, the simple fact remains, that in the past the municipalities have not carried out the law, or endeavoured to improve the sanitary condition of their districts, often no doubt more from ignorance than from want of will. The new Bill would not deprive the local bodies of the power of carrying out health legislation and sanitary works for themselves, it merely provides the means of informing them as to what they ought to do, with powers of compulsion if they fail.

With regard to the appointment of a Minister, we are very much of the same opinion as Mr. Service, and should prefer to have an independent Board of Health, composed largely of sanitary experts, somewhat on the same lines as the Board of Health of the Bill, but possessing in addition the powers given to the Minister. We do not see why this should not be "a form of Government suited to the feelings and circumstances of the Victorian people." If the results are satisfactory, so far as regards the health and general well-being of the community, the means will probably not be distasteful to popular feeling, even if not quite in accord with the principle—almost exalted into a fetish—of Representative Government. The proposal that the Board of Health should consist wholly or largely of municipal representatives appears simply illogical. The municipalities have failed in the past, how then will a Board consisting of their representatives help them to avoid failure in the future? If there has been friction in the past between

the municipalities and the expert central authorities, why should the members of a Board, composed of the representatives of the municipalities and expert authorities, agree better?

With the complaint that the law has not been consolidated, we are in entire sympathy. The law relating to Public Health cannot be too clear, or too simple, and ought to be intelligible to, and known by, every citizen.

Turning now to some of the details of the Bill, members of the profession will be glad to see the high and important position assigned to the Medical Inspector. It seems as if the success of the measure (should it ever be passed, which we doubt) will depend very much on the knowledge, ability and tact of the Medical Inspector; and it seems a pity that he, or what would come to the same thing, the Board, should not be in direct and confidential relation with the Minister. Should the head of the Department be of an autocratic disposition, and at any time differ in opinion from the Inspector or the Board, trouble will arise, as all the reports and advice of the latter have to percolate to the Minister through the permanent head. The duties of the Board, too, are very vaguely defined as "such as may be imposed by the Act, or by any regulations hereunder, or by the Governor-in-Council, or by the Minister." The only duties imposed by the Act apparently are to advise the Minister concerning the amount of compensation to be awarded in certain cases, while in Section 50 it is given power to hold inquiries.

Section 11 is important to health officers, as it provides that they may be removed by the Governor-in-Council, on the recommendation of the Minister, and may not be removed by the Councils without the previous approval in writing of the Minister. Thus, a health officer who does his duty too thoroughly to please the Council, cannot be intimidated so easily. He may still, however, find it greatly to his disadvantage as a practitioner to be too active as a health officer. Health officers should not be allowed private practice, but should be highly paid. They should be specially qualified in sanitary science, and in charge of large districts, formed by contiguous municipalities

joining in the appointment, as provided in Section 15 of the Act of 1883.

It is difficult to find any reason for the omission of alcoholic and other liquors from the operation of Section 12, dealing with adulterated and unwholesome food. Probably more harm is done by impure liquor than by adulteration of any other articles except drugs. Bitter opposition has been shown to the Sections dealing with the prevention of overcrowding. While the exact details of the areas to be allowed may require revision, the principle involved in these Sections must surely be admitted by every sensible person except, perhaps, a few greedy land-jobbers.

Time and space do not permit of the discussion of these and many other matters of detail in the Bill. Enough has been said to show that the measure is one requiring careful consideration by the profession.

Extracts from the *Medical Journals*.

DISEASES OF THE EYE.

In connection with the cataract operation, perhaps the most interesting discussion which has taken place on the subject occurred on the 9th of August last, during the sitting of the International Congress of Ophthalmology at Heidelberg.*

M. Gayet, of Lyons, who opened the discussion, enunciated a number of principles, some of which are the following:—

1. The incision should be along the corneal margin.
2. The flap operation should be practised.
3. The wound should be proportional in size to the size of the cataract. An incision which is too small may lead to grave difficulty. One which is too large does not usually give rise to serious inconvenience.
4. Iridectomy is unnecessary, and is rarely useful. If practised, it should be done beforehand.
5. The capsule should be opened with the point of the knife during the making of the corneal incision.
6. No instrument should be introduced into the anterior chamber with the object of removing lens.

* *Archiv d' Ophth. Jour.* 8, No. 5, 1888.

7. The portions of soft lens remaining should be removed by alternately injecting water and practising massage.

8. All manœuvres described are rendered easy and harmless by the use of cocaine, and certain in their results by asepsis.

9. Practically, the entanglement of the iris is the only accident which attends the operation.

10. Secondary operations are always full of uncertainty and danger.

M. Schweigger, of Berlin, responded, and a lengthy discussion followed, many speakers announcing their adherence to the principle of operating without iridectomy.

Von Graefe, of Halle, stated that he had only had six unsuccessful cases out of 445. He was an advocate of the practise of performing an iridectomy.

M. Haltenhof, of Geneva, said that if a vote were taken, it was quite evident that a majority of those present would decide in favour of the retention of iridectomy as a part of the operation.

Finally Knapp, of New York, compared the eye to a steamer, and iridectomy to the safety-valve of the engine. The safety-valve can be useful, but hundreds of ships cross the ocean without using it.

The controversy (of which the foregoing was a part) which has raged on the subject of the extraction of senile cataract, seems now to have died a natural death. The chief point in the controversy was the question of the inclusion of an iridectomy as a portion of the operation. Knapp and others have performed extractions without iridectomy with considerable success, and apparently prefer this method to the old one. Yet there seems to be a fairly general agreement that, at all events for operators of average manual dexterity, the method with iridectomy is the easier, and consequently safer. It is further admitted that the newer method is applicable only to selected cases—that is, cases in which there appears to be no tendency to iritis, no vessel disease, and, in fact, no liability to any complication. Consequently, it is very probable that iridectomy will continue to be a part of the cataract operation for reasons other than “the worship of a great name.”

A paper by C. G. Lee, of Liverpool, on this subject, is of interest. This writer reminds operators that success will be most likely to follow efforts made for the removal of every particle of soft lens matter; that by the ordinary methods of manipulation this result cannot be obtained in a number of cases of operation on immature cataract. With this expression of opinion, most

operators of experience will probably agree. The chief danger after extraction lies in the presence of these portions of non-removed lenticular matter, and, what is more to the point, at times they cannot be seen at the time of operation, and at other times when seen cannot be removed. If, then, it is necessary to operate in cases of immature cataract, some proceeding must be adopted for the removal of these pieces if anything like safety is to be secured. Mr. Lee prefers to irrigate the capsule with water, in preference to injecting with M'Keown's syringe, or manipulating. He records 21 cases in which he practised this manœuvre. In no case was there positive failure; in 6 of the cases, the cataract was immature; in 2 of the 6, fingers could be counted at 5 feet; in the remaining 4, at 1 foot.*

Dr. James Anderson, of the London Hospital, reminds ophthalmologists that cases of neuritis and of retinitis are met with, where, to all appearance, intracranial growth, renal disease, diabetes, and other recognised causes of inflammation of the optic nerve and retina can be excluded. He relates the histories of several cases of glycosuria, in some of which there was retinitis, and he points out that an examination of the urine of one of them, for a considerable period of time, would have given negative evidence. He urges that in all such cases, repeated examinations of the urine should be made for sugar as well as for albumen, and that in particular, the evening and after-dinner urine should be examined for sugar. He further points out that a urine of low specific gravity may yet contain much sugar. Shortly, it seems that these ocular affections are caused, at all events sometimes, by a glycosuria which is overlooked. Inasmuch as the presence of albuminuric retinitis seems to prognosticate death within two years, some interest attaches to Dr. Anderson's expression of opinion that the presence of diabetic retinitis is of no prognostic value.†

Jonathan Hutchinson concludes an elaborate paper on exceptional forms of choroiditis, by remarking, that the diagnosis of syphilitic from non syphilitic choroiditis was exceedingly difficult, if one simply relied on the ocular appearances. Bearing in mind the obscure ways in which specific contamination was effected, without the patient's knowledge, and the difficulty of proving heredity, it was an open question whether we ought not to suspect its presence

* *British Medical Journal*, March 30, 1889.

† *Ophthalmic Review*, February, March, April, 1889.

even in the cases where the evidence against it seems strongest. He urged that, whatever the stage and whatever the diagnosis, whether syphilitic or otherwise, mercury ought to have a prolonged trial in all cases of choroiditis. Excellent sight might be regained in spite of the most extensive destruction of the membrane.*

Priestly Smith has delivered some classical lectures on the subject of glaucoma. The essential element in primary glaucoma is the closure of the filtration angle in the margin of the anterior chamber. This must be regarded as a cause, and not as a consequence, of the glaucomatous condition. Amongst the predisposing causes of glaucoma, he places deficiency in the space between the lens and ciliary processes, which may be produced by (1) age, the lens being much larger in the old than in the young; or (2) by the existence of eyes of small size. In 32 per cent. of persons suffering from primary glaucoma, in whom the diameter of the cornea was measured, the diameter was less than the average in healthy eyes; whilst the corneæ of healthy persons over 40 years of age were small in only 5 per cent. of cases. (3) Insufficient circumlental space may also be produced by unusually large ciliary processes. The exciting cause of glaucoma is anything which will cause congestion of the uveal tract, and consequently, enlargement of the ciliary processes. If then the circumlental space is insufficient for them, they push forward and close the filtration angle. The advance of the lens is probably due to an unusual secretion of fluid into the vitreous, by the ciliary processes, which are compressed between the lens and the base of the iris. The cause of glaucoma is no more inflammatory, than is that of strangulated hernia. He believes that eserine reduces tension simply by its effect on the iris. With this opinion we are unable to agree absolutely, since we have seen a case of acute glaucoma, in which eserine relieved the symptoms some time before the pupil responded to its action. This circumstance indicates the probability of the accommodation spasm produced by eserine altering the diameter of the lens, and so increasing the circumlental space. In all cases of glaucoma, in which eserine is employed, cocaine should be employed with it in such proportion that the eserine contracts the pupil, whilst the cocaine contracts the uveal vessels. Iridectomy is a better operation than sclerotomy. It should be practised at the periphery of the chamber. It effects the cure of glaucoma in the following

* *Ophthalmic Review*, March, 1889.

way :—In the first place, the escape of the aqueous humor, and when there is much congestion, the escape of blood immediately lowers the pressure in the chamber. This, in the next place, relieves the obstructed circulation. The turgid ciliary processes subside, fluid drains away from the vitreous through the circumferential space, and the filtration angle re-opens. Lastly, if the filtration angle re-opens insufficiently, the lips of the wound, especially the inner lips, remain imperfectly united, and an abnormal outlet for the intra-ocular fluid is permanently established. The absence of a segment of the iris, and the presence of a more or less permeable cicatrix, are safeguards for the future.*

Ninety-nine cases of sympathetic ophthalmitis are recorded as having occurred in the German army during the war of 1870-71. The diagnosis of some of the cases is, however, uncertain. The fact of a large number of cases occurring implies either refusal on the part of the patients to submit to the excision of injured eyes, or else to want of knowledge on the part of the army surgeons.†

Deutschmann finds that microbes, passing from one eye to the other, in producing sympathetic disease, leave *via* either the choroid or the retinal vessels, and enter the sheath of the optic nerve. They work their way to the apex of the orbit against the lymph stream which is always descending, and finally reach the chiasma. They pass down the sheath of the optic nerve to the second eye with much less difficulty than they experienced in ascending the first (hence the rarity of meningitis), and finally reach the supra-choroidea, and infect the uveal tract—hence the usual appearance of early iritis. Microbes have been found in the sympathising eyes. Sympathising eyes have suppurated. Septic infection of the exciting eye is an almost necessary condition precedent to the disease; unless perforation of the exciting eye has occurred, sympathetic disease is nearly unknown.

Excision and evisceration of an injured eye, are operations of nearly equal value in preventing sympathetic disease. Simple neurotomy is distinctly unsafe, and resection of a 10 mm. piece of the nerve does not afford certain protection.‡

* Erasmus Wilson Lectures Royal College Surgeons, Eng. *British Medical Journal*, 1889.

† *Ophthalmic Review*, January, 1889. (Abstract.)

‡ *Ophthalmic Review*, April, 1889. (Abstract.)

In the Birmingham Board Schools, a large printed sheet is hung in the class rooms, with the following seven rules printed in large type :—

1. Sit upright ; sit square.
2. Keep your eyes, at least, twelve inches from your work.
3. Write on a slope, not on a flat, table.
4. Read with your book placed well up ; do not lay it down flat.
5. Do not read very small print.
6. Do not work in a bad light.
7. If you cannot see your work properly, tell your teacher.*

University Intelligence.

THE MELBOURNE UNIVERSITY.

The University Council at its meeting on the 25th inst. dealt with a report by the Professorial Board, prepared at the request of the Council, in regard to the failure of students to complete their years. The Board stated that the percentage of failures at the last ordinary examinations had not been abnormal, but certain anomalies in the existing system of examination were pointed out, and the Board made two recommendations—first, that students failing to pass the first or chief examination should be allowed to enter at the supplementary examination for that subject or those subjects only in which they have failed ; and, next, that in the arts, law, science, and engineering courses discretion should be given to the Board of Examiners to pass a student who was weak in only one of the subjects of his year, provided that the character of the rest of his work was above the average. The President of the Professorial Board attended for the purpose of more fully explaining the views of the Board. It was resolved to disagree with the first proposal, as likely to tend to lower the standard of examination ; but the second recommendation was adopted almost unanimously. The Council further decided to ask the Medical Faculty what objection, if any, it has to the same system being applied to the examinations of the Medical School.

* *Ophthalmic Review*, February, 1889. (Abstract.)

At its meeting on the 8th inst., the Council decided to appoint two Examiners in each subject, instead of three as formerly. The following are the Examiners in medical subjects:—Physiology and Physiological Chemistry and Histology—Professor Halford and Dr. J. W. Barrett; Descriptive and Surgical Anatomy—Professor Allen and Mr. F. D. Bird; Pathology—Professor Allen and Dr. Moore; *Materia Medica*, Therapeutics, and Medical Botany—Dr. Grant and Dr. Bennie; Therapeutics, Dietetics, and Hygiene—Dr. Springthorpe and Dr. Snowball; Obstetric Medicine and Diseases of Women and Children—Dr. Balls-Headley and Dr. Rowan; Theory and Practice of Medicine—Dr. Jamieson and Dr. Williams; Forensic Medicine and Psychological Medicine—Dr. Neild and Dr. Graham; Surgery—Mr. Girdlestone and Mr. C. S. Ryan.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At its meeting on the 28th ult., the Committee granted leave of absence for a fortnight to Mr. Fitzgerald.

Dr. Llewellyn, the medical superintendent, tendered his resignation, and requested to be relieved from duty as soon as possible. The resignation was accepted.

A Sub-committee, consisting of the President, Vice-President, and Messrs. Butters and Rowan, was appointed to consider the question of revising the duties of the medical superintendent, with power to appoint some gentleman temporarily to relieve Dr. Llewellyn.

At a special meeting of the Committee of the Melbourne Hospital, held on the 12th inst., Dr. Molloy was elected temporarily as resident medical officer, at a salary of £450 a year, with quarters. The Chairman explained that the appointment was made a temporary one, because a Sub-committee had already been appointed to consider whether it was not desirable to procure as Resident Medical Officer, a gentleman of wider experience, and at a higher salary.

WOMEN'S HOSPITAL.

At the meeting of Committee held on the 14th ult., an election was held for the appointment of a Resident Medical Officer for the midwifery department, a vacancy having occurred through the resignation of Dr. Anderson, and the transference of Dr. R. H. Fetherston from the midwifery department. Dr. L. F. Praagst has acted as *locum tenens* since the transference of Dr. Fetherston. Four applicants for the position were interviewed by the Committee, viz., Dr. W. M. Clayton, Dr. L. F. Praagst, Dr. R. Ruddle, and Dr. R. G. Scott. On a ballot being taken, Dr. W. M. Clayton was elected to the position by a majority of three votes.

At the meeting of the Committee held on the 21st ult., a resolution was carried to the effect, that in future no doctor should be appointed as a Resident Medical Officer of the institution without the Committee having been informed by the Secretary that it was intended to hold a meeting on a certain date for the purpose of making the appointment. Dr. L. F. Praagst, Acting Medical Officer of the midwifery department, tendered his resignation of that position, as he contemplated entering upon private practice. The resignation was accepted, and it was decided to advertise, and invite applications from gentlemen desirous of undertaking the duties of the position. Dr. T. J. M. Kennedy, who has been acting temporarily on the medical staff of the institution, was the only applicant for the post of Assistant Medical Officer in the midwifery department, and at the meeting of the Committee on the 28th ult., he was elected to the position.

The general executive committee of the movement for providing increased hospital accommodation met in the Town Hall on the 8th inst., and received a report from the Sub-committee appointed to devise a plan for the distribution of the funds obtained. The Government had promised a vote of £10,000 on the basis of £3 to every £1 subscribed by the public. The amount at present subscribed is £2,270, and the Committee hope to be able to increase it to £5,000. The Sub-committee recommended that such a grant should be given to the Alfred Hospital as would, with the funds available, not exceed £9000, on condition that a new wing or pavilion that is to be erected be devoted principally to cases of fever and infectious disease; that £3000 be given to the Homoeopathic Hospital for the completion of a new wing, £3000 to the

Austin Hospital towards the erection of a new ward, and £1000 each to the Convalescent Home for Women and the Convalescent Home for Men. The adoption of the report was moved by Mr. F. R. Godfrey (chairman of the Melbourne Hospital Committee), and seconded by Mr. Zox, M.L.A., but owing to errors that were discovered in it, whereby the resolutions of the Sub-committee were not correctly rendered, it was resolved that it should be referred back to the Committee for revision.

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and suburbs for May, 1889, shows that the births of 1513 children, viz., 815 boys and 698 girls, were registered. The deaths registered numbered 854, viz., 447 males and 407 females. To every 1,000 of the population of the district, the proportion of births registered was 3.45, and of deaths registered 1.95. One hundred and fifty-six deaths, or 18 per cent. of the whole, took place in public institutions.

The number of children under one year who died was 161, the total number under five years being 279.

Deaths from whooping-cough fell from 22 in April to 14 in May; and deaths from typhoid fever fell from 113 to 92, but deaths from diphtheria increased from 26 to 35. The following is a statement of the number of deaths from the two last-named complaints in each of the first five months of the present and two previous years:—

DEATHS FROM TYPHOID FEVER AND DIPHTHERIA, 1887 TO 1889.
(First five months of each year.)

	Deaths from Typhoid Fever.			Deaths from Diphtheria.		
	1887.	1888.	1889.	1887.	1888.	1889.
January	40	39	70	1	5	15
February	70	63	64	4	2	13
March	59	54	91	3	13	18
April	57	43	113	6	13	26
May	40	32	92	10	19	35
Total ..	266	231	430	24	52	107

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications :—John Stewart Merrillees, Auburn, L. et L. Mid. R.C.P. et R.C.S. Edin. 1888, L.F.P.S. Glas. 1888; Henry Wheeler, Hawthorn, M.R.C.S. Eng. 1860, L.R.C.P. Lond. 1861; David Montgomerie Paton, Caulfield, L. et L. Mid. R.C.P. et R.C.S. Edin. 1889, L.F.P.S. Glas. 1889; Francis William Wingrove, Eltham, L. et L. Mid. R.C.P. et R.C.S. Edin. 1889, L.F.P.S. Glas. 1889. Additional qualifications registered :—No. 1005, Eugene W. Anderson, Hawthorn, Ch. B. Melb. 1887 and M.D. Melb. 1888; No. 1519, Thomas J. M. Kennedy, Ballarat, Ch. B. Melb. 1888; No. 1374, Richard H. J. Fetherston, Prahran, M.D. Edin. 1888 and M.D. Melb. 1889 (a. e. g.); No. 1512, John C. Baird, Melbourne, Ch. B. Melb. 1889.

HEALTH OFFICERS.—The following appointments have been confirmed :—Shire of Oxley—Edward John McCardel, M.D., *vice* Archibald M. Macfarlane, M.B., resigned; United Shire of Beechworth—David Skinner, M.B., *vice* Alfred H. Parker, L.R.C.P., resigned; Shire of Lowan, South Riding—Edward Ryan, M.B., already Health Officer for the East Biding; Shire of Corio—Charles Monteiro D'Almeida Lempriere, M.R.C.S., *vice* Eustace J. Walshe, M.R.C.S., deceased.

PUBLIC VACCINATOR.—The following appointment has been made :—William Mayne Clayton, L.R.C.S., to be public vaccinator at the Women's Hospital, Carlton, *vice* R. H. J. Fetherston, M.B., whose resignation has been accepted.

Robert Wellesley Lethbridge, M.B., has been appointed a Junior Deputy Medical Superintendent, Hospitals for the Insane. Appointment to date from the 18th June, 1889. The resignation by Charles H. Hill, M.B., of the office of Junior Medical Officer, Hospital for the Insane, has been accepted.

A deputation from the Medical Society of Victoria and the Victorian Branch of the British Medical Association waited upon the Premier, for the purpose of laying before him the draft of a proposed bill to amend the Medical Practitioners Statute 1865. Among those present were Dr. Le Fevre, M.L.C., who introduced the deputation; Dr. Balls-Headley, president of the Medical Society of Victoria; Dr. Fishbourne, president of the local branch of the British Medical Association; Professor Allen, Dr. Springthorpe, Dr. Neild, Mr. Grant, Dr. J. P. Ryan, Dr. Shields, Dr. Barrett, Mr. Syme, Dr. Meyer, Dr. Maudsley, Dr. Barker and Dr. Bage.

Mr. Alfred Joseph was re-elected the president of the Bendigo Hospital for the ensuing year. Mr. S. H. McGowan, J.P., was elected as treasurer, and the vacancies for the committee were filled by Messrs. T. J. Connelly, Barkly Hyett and Dr. Hugh Boyd. The honorary medical staff was filled by the election of Drs. M'Kee, J. D. Boyd, J. Eadie, jun., and O. Penfold.

At the meeting of the Central Board of Health, held on the 5th inst., the president reported that in 1887 deaths from typhoid fever were 266; in 1888, they were 231; and in 1889, 430. The returns for diphtheria showed an equally large increase. In 1887 the deaths numbered 24; in 1888, 52; and in 1889, 107. The returns for typhoid fever for the last fortnight showed a distinct falling off both in the number of cases and deaths. The

number of cases reported for the whole colony was 135, and the deaths were 21. There was a slight reduction in the returns for diphtheria also. The number of cases reported was 72, and the deaths were 24.

The provisions of the Public Health Law Amendment Bill were explained in the Legislative Council, on the 19th ult., by Mr. Cuthbert, who stated that many of the proposals it contained had been introduced by the Government last session. The most important proposal was that the Central Board of Health should be abolished, and its powers relegated to a department of public health, which should be presided over by a responsible Minister, and include a secretary as permanent head, a medical inspector, an engineering inspector, and such other officers as might be deemed necessary. The present president of the Central Board was to be appointed to the position of secretary, and it was thought that a capable medical inspector would be obtained for £900 or £1000 a year. The duties of Minister of Health were to be undertaken by one of the present members of the Government. A board of health, consisting of five members, was to be appointed to carry out such duties as might be imposed upon them by the bill, or by the Governor in Council, or the Minister. Power was given to the Minister to enforce the appointment or removal of officers. The law relating to adulterated and unwholesome food was strengthened. Provision was made for the isolation of infected dwellings, and the removal of persons suffering from certain diseases to the hospital, for the intervention of the Minister in providing hospital accommodation where the local councils declined to carry out the present law, for the inspection and regulation of private hospitals, for the better management of abattoirs, for the prevention of the pollution of rivers and of the erection of buildings on unhealthy sites, &c.

Dr. C. H. Molloy, the resident physician, having obtained the appointment of temporary medical superintendent of the Melbourne Hospital, was permitted to resign his recent position at the Alfred Hospital.

BIRTHS.

BENNIE.—On the 25th ult., at 123 Collins-street east, Melbourne, the wife of Peter Bruce Bennie, M.D., of a son.

EADIE.—On the 9th ult., at Belair, Caulfield, the wife of James Eadie, M.B., of a daughter.

MARRIAGES.

DALY—LORD.—On the 26th ult., at Christ Church, St. Kilda, by the Rev. J. Stanley Low, Ulrick Arthur Daly, M.B., T.C.D., Gisborne, Victoria, to Laura Mary, fourth daughter of Samuel P. Lord, Esq., of Manhattan, Carlisle-street, St. Kilda.

NORRIS—FOULKES.—On the 23rd May, at the residence of the bride's mother, Pen-y-bryn, North Carlton, by the Rev. Thos. Adamson, William Perrin Norris, M.B., B.S., second son of W. Norris, Parkville, to Mary (Polly) Foulkes, eldest daughter of the late John Foulkes, North Carlton.

THOMAS—A'BECKETT.—On the 13th ult., at All Saints', St. Kilda, by the Rev. Charles Vaughan, Charles Frederick, eldest son of Charles Thomas, of Brighton, to Marian Emily, third daughter of William G. A'Beckett, M.R.C.S., St. Kilda.

DEATH.

SCHIEL.—On the 29th ult., at Rutherglen, Dr. Hugo Schiel, late of Cheltenham aged 34.

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Original Articles.

THE AMPUTATION OF FINGERS.

By J. H. WEBB, M.R.C.S.E.

A question, concerning which there exists considerable diversity of opinion, is that of the removal of fingers—fingers that have been stiffened, or acutely flexed, as the result of thecal abscesses. We well understand that, as a rule, the forefinger, if simply rigid, should not be interfered with, and yet there are exceptions to this practice. A forefinger of the left hand, sticking straight out from the carpus, is a great encumbrance, as it cripples the use of the other fingers. I removed one once, simply for convenience, at the joint between the first and second phalanx, and the patient afterwards expressed himself well pleased with the result. Among the working classes, I can conceive that occasionally an instance may occur where the operation is desirable, even in the right hand. Of course among clerks, the case is different, but it is surprising how quickly men learn to write, as well as they did before, after their forefinger has been removed. Still, under all circumstances, the loss of this finger is a serious one, but I believe it to be the only single digit where retention, when stiffened, is to be commended. Ask anyone, and there are plenty about with one of the other fingers straightened and powerless, and he will tell you how much they get into the way, and he is nearly certain to end his conversation by saying how much he wishes he had had it off at the time. The little and ring finger of the left hand cannot be of very much service, except as an assistance in gripping. For, many savage Indians, the North American for instance, living on plains and prairies, have their's chopped off as a religious rite, and if this mutilation was of so much consequence, an impediment to their hunting and fishing, it may fairly be presumed that they would

have found some other way of appeasing their evil deity. In woody countries, and in the bush, these digits are essential for climbing purposes, and consequently cannot be spared.

Of course I don't mean to imply that amongst civilised people the little and ring finger are useless, but except as a rest in writing, music playing, &c., when stiffened, they are just as well taken off as left on. They only impede the grasp, and can never again be of the slightest service.

As regards the method of amputating fingers, I question if it is not straw-splitting to prefer one description of flap to another; as long as the flaps are taken from the finger and not the hand, it can be of little consequence what amputation is employed; but it is of very great matter where the finger is removed. The plan of sawing or cutting off the head of the meta-carpal bone, so that the hand may look elegant, I look on as being about the most silly piece of operating that a surgeon can be guilty of—a person requires his hand for use, not show—and yet this proceeding is often done. I saw a case quite recently where this absurd operation had been performed by a very distinguished London surgeon, and the hand he has left will remain, as long as its owner lives, an illustration of how a middle finger should not be taken off. Regard for a moment the merits and demerits of this procedure. Its merit is, it is supposed to give a more graceful, gloveable member; its demerits are, by spoiling its breadth, the hand is weakened, and very much so; owing to the removal of a wedge from the centre of the hand, the fore and ring, or the middle and little fingers, fall together, so as to greatly impede the free flexion of the digits that are left. The grasp is nearly destroyed, at all events, much enfeebled, and during healing, the tendency to palmar abscesses increased. In removing either the ring or middle finger, I am convinced that, if possible, nothing more than a slight shaving from the head of the meta-carpal bone should be taken away. Whatever cartilage can, may be scraped off with a scalpel, but even this is hardly necessary. To do more is to divide the intra meta-carpal ligments, a procedure which cannot possibly be beneficial, and must more or less weaken the hand. If the divided flexor and extensor tendons could be fixed, much benefit would probably accrue, but I don't really see how this can be done.

NOTES OF A CASE OF DERMATITIS GANGRÆNOSA INFANTUM.

By W. MOORE, M.D., M.S.

This disease is of such great rarity, whilst its connection with varicella and vaccinia is so important, that I feel that no further apology is required for publishing the somewhat meagre details of the following case. The disease, though apparently noticed by older observers, was first accurately described by Mr. Jonathan Hutchinson, by whom the terms "varicella gangrænosa" and "vaccinia gangrænosa" were introduced. Though no doubt frequently associated with varicella and vaccinia, it has been conclusively shown that, in some cases, there is no connection whatever with either of those diseases. For this and other obvious reasons, many authorities object to the above names, and Crocker has made use of the title which we adopt.

On the 6th June, 1889, I was asked to see for Dr. Youl, a child, W. H., æt. 7 months, in the Infant Asylum, at East Melbourne, but the child was dead before I saw him. Until four months old, the child was nursed by his mother, who at that time was attacked by typhoid fever, from which she died. Previous to this, he, with several other children in the Asylum, had suffered from a peculiar purpuric condition, involving chiefly the back and the head. In these regions was a number of small hard lumps, feeling under the finger like shot, and over these lumps were circular patches of bluish discolouration. Dr. Youl, being puzzled to know the cause of this condition, thought that it might be due to overcrowding, and accordingly he ordered the affected children to be kept by themselves in a small detached wooden cottage. Here they rapidly recovered their health, which had failed markedly, and the lumps and discolouration gradually and very slowly disappeared. He was then about four months old, and on the death of his mother was put out to a wet-nurse, whose own child was fifteen months old. His foster-mother states that he was an exceedingly good child, and seemed to be thriving well until eleven days before his death, when she noticed small red spots about his buttocks and thighs, and also that his scrotum was somewhat swollen. Two days after this he was seen by a doctor, who ordered an ointment to be applied to the sore places. Blisters quickly formed at the spots first affected, and the skin soon peeled off, leaving raw surfaces.

She says there was no bad smell from the sores until the night before the child's death, when it was very foul.

The following day, at Dr. Youl's request, I made an examination of the abdominal organs, and of the parts affected. The kidneys were large and pale, but otherwise the abdominal viscera were natural in appearance. There was a thick layer of subcutaneous fat. On the buttocks and the inner surface of the thighs were numerous irregularly circular ulcers, several of them being about the size of a half-crown piece. The ulcers had all a punched out appearance, and the sloughs had completely separated. The skin between the ulcers was of a red colour, as also was the scrotum, and these parts were much thickened by serous infiltration.

It is very difficult to determine the causation of the disease in this case. The child was of the age at which the disease most usually occurs, as it is generally met with in children under a year old. It is most common in girls, whilst our case was a boy. The child had not had varicella, nor had that disease been prevalent at the Asylum. Vaccination had been performed at the Women's Hospital in the first few weeks of life, so that the disease cannot in this case have had anything to do with vaccinia. There was no sign of hereditary syphilis, or of rickets. The question is, as to whether it was in any way connected with the peculiar purpuric condition that occurred several months previously. This is very unlikely, especially as the other children who were similarly affected have not suffered since. This case must therefore be placed among those occurring in apparently healthy children.

In consequence of statements made in the daily press, to the effect that typhoid germs had been found in the Yan Yean water, Dr. Katz, of Sydney, has been engaged by the Sanitary Commission to make analyses of water from the Yan Yean reservoir, with the view of determining the question. Professor Allen, president of the Commission, has placed his laboratory at the University at Dr. Katz's disposal, and the necessary preparations for the tests are now being made. Dr. Katz has been engaged for over two years in similar work in Sydney, and he brings with him fully developed typhoid microbes, the real nature of which has been placed beyond all doubt. Mr. A. de Bavay, who first reported the existence of typhoid germs in the Yan Yean water, has agreed to supply Dr. Katz with such germs of his own culture, and these will be submitted to a series of careful tests, in order to determine their nature. In addition to this, samples of water will be taken from the Yan Yean reservoir, from taps in both high and low levels, and also from rain water tanks, and the germs contained in these will be grown, and their nature ascertained. Dr. Katz has been engaged for a period of one month, and it is probable that this time will elapse before any positive results are arrived at.

ECHINOCCOUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES.—CONT.
By J. DAVIES THOMAS, M.D.—Continued.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
8.	Lindemann, 1886. Cited by Schlegelendal in Archiv für Klinische Chirurgie, Berlin, 1888.	—	—	—	—	Case in private practice.	Cured.
9.	Saenger, 1876. Cited by Schlegelendal. Loco. cit. p. 209.	M.	?	Liver.	Incision with stitching, before opening of sac. Daily carbolic injections.	In Virchow & Hirsch's Jahrbuch for 1877, this case is referred to as that of a female, not of a male.	Cured in three weeks.
10.	Landau, 1879. Cited by Schlegelendal, also in Gaz. Med. de Paris, 1880, and Ann. Med. Jour., Dec. 1880, p. 572.	F.	12	—	Incision down to liver surface; exploratory puncture. Partial stitching of liver to parietal wound; excision of a piece of liver substance; incision of cyst; removal of mother-cyst; drainage; Listerian.	—	Cure complete in seven weeks.
11.	Landau. Arch. für Klin. Chir. Band XXVIII. p. 720. 1882.	F.	6	Two hydatids.	Both cysts operated on in one sitting by incision.	—	Cure.
12.	Assenuth, 1881. Cited by Madelung. Op. cit. p. 208. Petersburg Med. Wochenschrift, 1883.	F.	35	Liver.	Lindemann's method. Patient became collapsed during the operation.	Mother-cyst did not escape completely for ten days; copious discharge of bile which began on the fifth day. Attempts to close the fistula caused serious symptoms.	Recovery with a biliary fistula.
13.	Lederink. Cited by Korsch. Berl. Klin. Woch., 1883; also Schlegelendal, Op. cit.	M.	36	Two cysts in right lobe of liver.	One of the cysts was operated on by incision in one stage; the other five weeks later by operation in two stages.	—	Cured.
14.	Winiowaki, 1883. Cited by Madelung. Op. cit. p. 208.	F.	25	Liver.	Lindemann's method.	Profuse discharge of bile began on twelfth day and continued about three weeks.	Cured.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES—CONT

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
15.	Grünberg, 1882. Cited by Madelung. Op. cit. p. 202.	M.	32	Liver.	Lindemann's method.	No pyrexia; on the sixteenth day evacuation of the sac contents. Profuse discharge of bile for several weeks.	Cured.
16.	Knowsley Thorndon. Med. Times and Gaz., 1883. Vol. I. p. 80.	F.	41	Large cystic tumour, occupying the whole right side of the abdomen.	Incised and stitched to the parietal wound.	—	Cure, four weeks.
17.	Lawson Tait. Four cases of Hepatotomy. Birmingham Medical Review, Oct. 1881. Case I. Aug. 1880.	F.	37	Large hydatid of liver; distinct fluctuation below the right ribs.	Incision through peritoneum; aspirator needle inserted for exploration; incision of liver; margins of wound in liver secured by forceps; stitching; large glass drainage-tube; carbolic injections twice daily.	Patient extremely emaciated and exhausted before the operation; some hæmorrhage from cut surfaces of liver arrested by the continuous suture. No Listerian precautions.	Cure, eight weeks.
18.	Lawson Tait. Loco. cit. Case III.	.	25	Liver.	Incision; removal of cysts with a spoon; stitching; glass, and afterwards indiarubber drainage-tube.	Drainage-tube removed in about ten weeks.	Cure.
19.	Lawson Tait. Loco cit. Case IV.	F.	21	Right hypochondrium.	Incision, stitching, drainage.	"The thickness of liver-tissue through which I passed was nearly an inch, and I had a little trouble with hæmorrhage which was however completely controlled by pressure."	Cure.
20.	Lawson Tait. Op. cit. Sept. 16, 1881.	—	—	—	"I have operated on three other cases of hydatids of the liver in exactly the same way, and all have done well."	—	Cure.
21.	Lawson Tait. Op. cit. Sept. 16, 1881.	—	—	—		—	Cure.
22.	Lawson Tait. Op. cit. Sept. 16, 1881.	—	—	—		—	Cure.

ECHINOCCOUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES.—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
23.	Fuky. Archiv für Klinische Chirurgie, 1886. Vol. XXXVI n. 101	F.	33	One cyst in left lobe of liver, another in the right lobe.	Liver cyst, punctured three times; first incision in the abdominal wall; cyst incised contained over 5,500 cysts; drained; antiseptic precautions; liver cyst incised; stitched; emptied as far as possible; thymol injections.	The liver cyst soon healed, but that in the abdominal walls became septic; ultimately recovery took place.	Cure.
4.	Moss. Cited by Neisser. Op. cit. No. 912, p. 202.	M.	30	Suppurated liver hydatid; fluctuation and redness of skin, &c.	Incision, antiseptic treatment, drainage, pus and cysts.	A piece of the drainage-tube became detached in the attempt to remove it and was left in, apparently without ill effects.	Cure.
5.	Compland & Gould. Clinical Society reported in Lancet, Dec. 17, 1887, p. 1219.	M.	17	Left lobe of liver; hydatid cyst of the size of an orange, projecting chiefly on the posterior surface of the organ.	Cyst exposed and punctured; clear fluid; cyst wall stitched to peritoneum; drainage-tube. The mother-cyst came away ten days later.	During the convalescence, the adventitious sac was also extruded. Rapid recovery.	Cure. Left Hospital thirty-five days after the operation.
26.	Daly. Lancet, May 19, 1888, p. 967. Hull Infirmary, 1886.	M.	31	Probably of liver: very large cyst.	Tapped; brownish albuminous fluid removed containing micro-organisms; six subsequent tapings; signs of peritonitis; incision; antiseptic injections; drainage.	Pyrexia and decomposition of fluid of cyst before operation. Hydatid membrane found at time of operation.	Cure rapid and complete.
27.	Arnold. Inaug. Diss. Greifswald, 1881. Vogt's case.	F.	31	Right hypochondrium; symptoms of gallstones, jaundice, pyrexia.	Exploratory puncture; purulent fluid; incision under antiseptic precautions; a considerable amount of fluid escaped, and under the mistaken impression that the sac had been opened, the thickened peritoneum was stitched to the parietal wound; drainage-tube inserted; antiseptic dressings.	Futile operation. The patient recovered in consequence of the escape of the hydatid contents by the bowel.	Recovery.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES.—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
28.	Wieland. Cited in Virchow & Hirsch's Jahresbericht for 1896. Vol. II. p. 607.	F.	31	Liver.	Lindemann's Operation. Drainage.	—	Cure.
29.	Dunn. Aus. Med. Jour., Oct. 1891, p. 393. (Dr. Southie operated.)	M.	27	Right hypochondrium.	Incision about three inches long; escape of mother-cyst; edges of wound brought together with sutures and adhesive plaster.	—	Cured.
30.	C. Gosses. Cited by Garner, Proc. S. A. Br. of Brit. Med. Ass., Oct. 1886.	F.	11	Liver.	Abdominal section.	Suppurated cyst; patient excessively emaciated.	Cured.
31.	Shewen & McCormick. Aus. Med. Gaz., March 1887.	M.	43	Large cyst of liver.	Exploratory puncture, incision; iodine injections; antiseptic dressing.	Occasional pyrexia with abdominal tenderness during convalescence.	Cure. (?)
32.	J. Davies Thomas. May 24, 1883.	F.	23	Very large hydatid of right lobe of liver; multiple cysts of abdomen, probably omental; large hydatid of spleen. The splenic cyst was enormous, and contained hundreds of daughter cysts.	Canule-à-demeure in largest cyst; laminaria tents; antiseptic injections for removal of cyst; copious discharge of bile; sinus left for nearly four months; then incision of another cyst; immediate removal of mother-cyst; stitching to parietal wound; three cysts opened and drained.	In largest cyst, nearly clear fluid, containing cholesterolin, degenerated scolices, &c. Four months after incision operation another incision operation on spleen; removal of mother cyst; free drainage, stitching, &c.	Complete cure.
33.	J. Davies Thomas. June 1881.	M.	26	Right lobe of liver.	Tapped nine months previously in Victoria. Incision; immediate removal of mother-cyst; stitching; ~~antiseptic dressing~~ ; free drainage.	No indications of degeneration of the parasite, in spite of previous tapping.	Cure complete on fifty-eighth day.
34.	J. Davies Thomas. Sept. 1884.	M.	14	Right hypochondrium and epigastrium.	Tapped four times within three years. Exploratory incision; no fluid obtained by puncture of the exposed part of the liver surface; wound closed; antiseptic precautions.	Before the operation, pyrexia and jaundice; a fortnight later, escape of hydatid shreds per rectum. Cessation of jaundice.	Complete recovery

ECHINOCOCCUS CYST OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES.—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
35.	J. Davies Thomas. 1887.	M.	32	Left lobe of liver.	Incision; immediate removal of mother-cyst, &c.; antiseptic dressings.	A piece of the fibrous capsule separated during convalescence.	Cure in two months.
36.	J. Davies Thomas. March 1887.	F.	7	Right lobe of liver.	Incision, &c.	Copious discharge of bile for a month, with absence of hills from motions; shreds of capsule detached during convalescence.	Cure complete on seventy-third day
	Way & Davies Thomas Aug. 1884.	M.	30	In left hypochondrium.	Incision; sac adherent to peritoneum; stitched to parietal wound with kangaroo tendons. In spite of antiseptic precautions, decomposition of cyst contents occurred	Very numerous daughter-cysts.	Cure.
38.	Way. Feb. 1888.	M.	31	Right lobe of liver.	Abdominal incision; immediate removal of mother-cyst; stitching, &c.; clear hydatid fluid.	During convalescence a second hydatid-cyst ruptured spontaneously into the sac of the one operated upon.	Cure.
39.	Way. Children's Hospital, Adelaide. Jan. 1887.	M.	9	Probably in left lobe of liver, containing clear fluid.	Abdominal section in median line; sac stitched to the parietal wound by kangaroo tendons, and then incised; mother-cyst removed entire; steam spray and antiseptic dressings.	A piece of omentum protruded at the wound a few days after the operation; this was ligatured and cut off. The discharge was bile-stained for a few days.	Cured in about two months.
40.	Dr. Verco. Adelaide Hosp. 1883.	F.	70 (?)	Liver.	Aspiration; incision; dilatation of wound by laminaria.	Mother-cyst not removed at time of operation.	Cured. (?)
41.	Gardner. Proceedings of the S. Aus. Branch of the Brit. Med. Ass., Oct. 1886.	F.	—	Liver.	Abdominal section.	Mother-cyst washed out.	Cured.
42.	Gardner. Proceedings of the S. Aus. Branch of the Brit. Med. Ass., Oct. 1883.	F.	(?)	Convex surface of liver.	Abdominal section; cyst washed out	—	Cured.

ECHINOCCOUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES.—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
43.	Gardner. Proceedings of the S. Aus. Branch of the Brit. Med. Ass., Oct. 1885. Adelaide Hospital, 1884.	F.	32	Pedunculated cyst attached to liver.	Abdominal section; incision down to sac; evacuation of 12 ozs. by aspiration; sac then stitched to parietal wound. Seven days later mother-cyst removed. Abdominal section.	Antiseptics; discharge bile-stained.	Cured.
44.	Gardner. Proceedings of the S. Aus. Branch of the Brit. Med. Ass., 1882.	M.	25	Liver.		—	Cured.
45.	Gardner. Proceedings of the S. Aus. Branch of the Brit. Med. Ass., 1882.	F.	8	Liver.	Abdominal section.	—	Cured.
46.	Gardner. Proceedings of the S. Aus. Branch of the Brit. Med. Ass., 1882.	F.	?	Lower edge of liver.	Abdominal section.	—	Cured.
47.	Gardner. Proceedings of the S. Aus. Branch of the Brit. Med. Ass., 1882.	M.	11	Liver.	Tapping; then abdominal section.	—	Cured.
48.	Gardner. Adelaide Hospital, Sept 1887.	M.	24	Epigastrium.	Aspiratory puncture; clear hydatid fluid. Incision; stitching; cyst washed out after operation; drainage, &c.	Suppuration occurred in the sac; copious discharge of bile for a month.	Cured in six weeks.
49.	Gardner. Adelaide Hospital, Dec. 1887; March 1888.	M.	15	Multiple abdominal hydatids, including one of liver. Ascites.	Incision gave exit to acetic fluid; second incision in left hypochondrium; acyst opened and stitched; bilious, viscous fluid escaped; another cyst opened, shreds of membrane removed; drainage-tube; antiseptic dressings. Re-admitted three months later and a cyst in the right hypochondrium, as well as one in the lumbar region, was treated by incision.	Discharged after first operation with a sinus, discharging bile; after second operation, also abundant escape of bile from the liver-cyst.	Discharged at own request, apparently convalescent.

ECHINOCOCCUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES.—CONT.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
50.	Gardner, Adelaide Hospital, Feb. 1887.	M.	47	Elastic tumour in epigastrium; obscure fluctuation; tympanitic on percussion over upper part; echinococcus of left lobe of liver.	Aspiratory punctures gave exit to fetid pus; abdominal section; stitching; drainage-tube, &c.	Contents of cyst, fetid pus and cysts.	Discharged convalescent in eight weeks.
51.	Gardner, Adelaide Hospital, 1887.	F.	25	Apparently multiple cysts in liver.	Abdominal section with preliminary stitching.	A second cyst ruptured into the one incised; the third cyst untouched; sinus at time of discharge from hospital.	Cured ultimately.
52.	Gardner, Adelaide Hospital, 1887.	F.	14	Right hypochondrium.	Incision down to sac; sac stitched to parietal wound; incision; then deep stitches of lips of wound in sac to parietal wound; irrigation of cavity; cyst contents not removed at time of operation; pyrexia.	Clear fluid; antiseptic treatment drainage-tube removed in two months.	Cured.
53.	Gardner, Adelaide Hospital, 1887.	.	19	Right hypochondriae lumbar and epigastric regions.	Tapped; incision; loops of silk passed through sac for use during operation; immediate incision of sac; stitches; drainage-tube; antiseptic dressings; pyrexia 102-103°; cyst contents not completely evacuated at time of operation.	Discharged nearly cured.	Cured.
54.	Gardner, Adelaide Hospital, Jan. 1888.	F.	22	Hydatid of convex surface of liver.	Aspiration by Dr. Way. Abdominal section by Dr. Gardner; second operation in one of the lower interspaces.	Very grave symptoms of collapse followed the puncture.	Cured.

ECHINOCCUS CYSTS OF THE LIVER TREATED BY LINDEMANN'S OPERATION—ABDOMINAL SECTIONS—CURES.—CONT.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
55.	Gardner. Adelaide Hospital.	F.	29	Hydatid cyst projecting from the under surface of the left lobe of the liver; tumour freely movable from side to side; hydatid fremitus.	Abdominal section, stitching, &c. Immediate removal of mother-cyst.	—	Cured, four weeks.
56.	Stirling. Adelaide Hospital, Oct. 1886.	M.	46	Liver.	Abdominal section; contents not evacuated at time of operation; suppuration took place.	The sac was either double or single, with a constriction.	Cured. Sinus left when discharged from hospital.
57.	Stirling. Adelaide Hospital, Sept. 1887.	M.	8	Right hypochondrium.	Abdominal section; stitching; immediate removal of mother-cyst.	Orchitis and swelling of the scrotum occurred during convalescence.	Cured in five weeks
58.	Poulton. Adelaide Hospital, May 1888.	F.	16	Large abdominal hydatid, probably hepatic.	Abdominal section; immediate removal of mother-cyst; stitching, &c.	Fistula remaining five months later; no escape of bile.	—
59.	Görger. Adelaide Hospital, Feb. 1887.	M.	52	Liver.	Abdominal section; sac adherent to parietes; stitching; incision.	Large quantity of cysts and hydatid fluid escaped.	Cured in three and a half months.
60.	Brown. Aus. Med. Gaz. Oct. 1887, p. 3.	F.	24	Probably left lobe of liver.	Abdominal section; curved aspirator needle passed through the cyst, the point of the needle being brought out at the upper end of the incision, holding the cyst wall between it and the parietes; the incision was then carried through the sac, and the latter sutured to the parietal wound.	Drainage-tube inserted. Cyst injected with Condy's fluid; mother-cyst not removed till eighteenth day, and hence profuse mucopurulent discharge. A portion of the fibrous capsule was detached during convalescence.	Cured.
61.	J. Davies Thomas. Private practice, Oct. 1888.	M.	25	Enormous hydatid originating at under surface of right lobe of liver, which filled the abdominal cavity and extended to the bottom of the pelvis	Abdominal section; immediate evacuation of cyst contents, stitching, &c. The pelvis was washed out twice daily for a fortnight with warm boris acid solution.	Patient very prostrate at time of operation from pyrexia, &c.; cyst contained thousands of daughter-cysts.	Convalescent, Nov. 1888.

ECHINOCOCCI OF THE LIVER—THORACIC INCISIONS, ACCORDING TO LINDEMANN'S METHOD—CURES.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Larsen. Cited by Virchow and Hirsch. Jahresbericht. 1879. Vol. II., p. 412.	F.	32	Convexity of Liver.	An inch of the sixth rib in the anterior axillary line was excised, and the pleura opened to a corresponding extent. Lister's dressings applied seven days later, diaphragm incised, and cyst opened; wound plugged with carbolic gauze; nine days later sac freely opened and drained.	Cure in 94 weeks, after profuse discharge of bile.	Cure.
2.	Gauxner. Cited by Virchow and Hirsch. Jahresbericht. 1879. Vol. II., p. 412.	(?)	(?)	Suppurated cyst on convexity of liver.	A piece of the seventh rib excised. Pleura incised; no adhesions; the diaphragm did not lie adjacent to the wound, so that the formation of adhesions at the desired spot could not be reckoned upon. Consequently the diaphragm was immediately incised, and one large drainage tube was passed into the cyst, and another into the pleura. Some irritation of the pleura followed; antiseptic injections and dressings.	The sac was not stitched to the edges of the parietal wound. Profuse discharge of bile.	Cure in eighteen weeks.
3.	Schede, 1882. Cited by Medelung. Op. cit. No. 133, p. 127.	M.	Adult	Suppurated hydatid of convex surface of liver.	Exploratory puncture; sero-purulent fluid and hooklets. Excision of portion of sixth rib in the axillary line. Pus and cysts. Drainage; antiseptic treatment.	Cachexia; jaundice; pyrexia; copious discharge of bile. Convalescence protracted, but ultimately complete.	Cure in two or three months.
4.	Bird. Aust. Med. Jour., Oct. 1883.	F.	20	Convexity of liver.	Repeated punctures; injection of iodine; administration of kamala, turpentine and bromides; insertion of large trochar; antiseptic injections, but fester came on; incision and extraction of cyst; drainage and injections.	Failure of all treatment tried, except extraction of parasite.	Cure.

ECHINOCOCCI OF THE LIVER—THORACIC INCISIONS, ACCORDING TO LINDEMANN'S METHOD—CURES.—CONT.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
5.	Edmund Owen, at Clinical Society. <i>Lancet</i> , Dec. 17, 1887, p. 1220.	F.	34	Convexity of right lobe; compressing right lung.	Aspiration; clear fluid; afterwards repeated aspirations between the ribs. Incision in eighth interspace; diaphragm incised. Cyst partially evacuated by aspiration, dragged up to parietal wound and secured by hare-lip pins. Wound dressed with wood-wool pads. Cyst incised on fourth day; large drainage tube and daily injections of warm iodine water.	—	Cure
6.	J. Davies Thomas, 1887.	F.	18	Hydatid of convexity of liver.	Exploratory puncture in seventh interspace, in mid-axillary line; 28 ozs. of clear hydatid fluid; a month later incision; excision of 2½ inches of seventh rib; incision and stitching of sac; removal of mother-cyst; drainage and antiseptics.	During the operation, the fibrous capsule collapsed, so that its opposite walls touched. The patient left her bed in a week.	Cure complete in two months.
7.	Shewen. <i>Aust Med. Gaz.</i> , March 1887.	F.	11	Liver.	Exploratory puncture yielded pus. Incision in eighth interspace, axillary line; puriform fluid and bile; cavity in liver washed out twice daily; afterwards empyema; incision, resection of rib, drainage, &c.; fluid foetid, but no communication with liver cyst could be discovered.	Extreme emaciation and hectic blush, faintness, unconsciousness, squinting, &c., apparently caused by syringing the cavity.	Cure.
8.	Verco. Private practice, Jan. 1887.	F.	28	Conver surface of liver.	Incision in the sixth interspace; 1½ inch outside the right nipple line.	Jaundice before the operation; copious discharge of bile for some months after the operation.	Cure complete in six months.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, AUGUST 7TH, 1889.

(Hall of the Society, 8 p.m.)

The President (Dr. BALLS-HEADLEY) was in the chair, and there was a very large attendance of members.

The minutes of the preceding meeting were read and confirmed.

The following gentlemen were then elected members of the Society:—Alfred T. Hamilton, L.R.C.S. Ed., L.R.C.P. Ed., and L.F.P.S. Glas., of Cathedral Hotel, Swanston Street, proposed by Dr. Duncan, and seconded by Dr. Williams; H. F. Lawrence, L. et L. Mid., R.C.P. et R.C.S. Ed. and L.F.P.S. Glas., of Brunswick Street, Fitzroy, proposed by Dr. Moore, and seconded by Dr. Morton.

Two gentlemen were nominated for membership as ordinary members, and one as an honorary member.

Mr. STIRLING then exhibited two dermatological cases, of which he furnished the following notes:—

(1.) *A Case of Dermatitis Exfoliativa.*

Mrs. M., æt. 40, no children, has always enjoyed good health until last February, when she noticed a few small spots, similar, she states, to those of measles, but with a little white "blister" in the centre, on the face (forehead), and the backs of her arms. These spots were not attended with much itching, and were always quite dry. Her skin generally throughout life has been dry, with little tendency to perspire. In a few weeks, the whole skin became quite red, and was covered with a great quantity of thin whitish scales. Its colour at certain parts is deeper than at others; and, in the skin of the lower extremities, the redness at times gives place to lividity. The back was the part of the body the last affected.

She came to the out-patient room for treatment early in May, but disappeared after two visits, giving as her reason, when she returned this morning (August 7th), that her feet had become so much affected, she was unable to walk.

Her present condition may be described by saying that her trunk and limbs are covered with thin, branny scales, with the skin of a deep red colour; the scales are rapidly and continuously formed and exfoliated. At times, the scales are much larger than others. There is no thickening or infiltration of the skin; no

crusting. Beneath the nails are thick epidermic accumulations, which are lifting them from their bed.

(2.) *Case of Ulceration of Forehead probably due to Hereditary Syphilis.*

J. L., æt. 23, about two years ago received a hard blow from the handle of a windlass, on the bridge of the nose; about three months subsequently, a small pimple appeared at the site of the blow, which formed a sore, and spread at its edges. The nasal bones becoming diseased, he was operated on by a doctor in Castlemaine, who scraped away the granulations; healing occurred, but the ulceration spread along the centre of the forehead, to the limit of the scalp, which has not been attacked. There is a patch on the outer angle of the orbit, which is of more recent growth, and another on the neck.

The disease is painless. Before coming under treatment, there was a profuse fœtid discharge, which has now, with the process of cicatrisation, quite ceased. The general health has been unaffected.

Dr. O'SULLIVAN also exhibited, with her child, a woman on whom he had recently performed Cæsarian section.

Dr. SHIELDS then brought before the Society, on behalf of the Central Board of Health, the question of fixing the maximum age, within which parents should be obliged to have their children vaccinated, at three months, instead of six months as at present.

The following is the substance of Dr. Shields' remarks :—

AT WHAT AGE SHOULD CHILDREN BE
VACCINATED?

The Vaccination Act now in force in this Colony renders it compulsory that children should be vaccinated within six months from birth, unless contra-indicated by the state of the child's health, when a medical certificate to that effect will postpone the operation indefinitely.

In England, the legal limit is three months from birth, and Dr. Plummer, one of the most experienced public vaccinators in Victoria, has suggested to the Central Board of Health that it would be a decided advantage if the vaccination period in this Colony were brought into conformity with the English Act, and reduced to three months.

The advantages claimed for the shorter term are the following :—

(1) Under three months, children are more passive than when older, and therefore the operation is done quietly and more

efficiently. (2) There is less rubbing of the arm, and interference with the vesicles during the vaccine process. (3) Dentition is not a complication at such an early stage. (4) The sooner vaccination is done after birth, the less opportunity have the parents of evading the Act.

In regard to this last consideration, it must be admitted that it has greater force in these colonies than in England, as the population here, especially the poorer class, move about a good deal, and are less settled than in the old country. On the other hand, small-pox does not exist here, and on that account, there is not the same urgency for early vaccination. The marked difference in our climate ought also to have due consideration, for it is certainly not advisable that infants should undergo the operation and its results in the very warm weather. As we have at least three months of hot weather each season, a number of children would be vaccinated every year during these months, unless some provision was made in the Act to meet this difficulty.

Then, in connection with this subject, the question of inherited syphilis must not be overlooked. In the event of a child showing signs of syphilis subsequent to vaccination, the probability is, that the vaccine lymph would be blamed even where the real cause was the hereditary taint in the child. In this way, both vaccination and the vaccinator might be unjustly discredited, as such symptoms may not appear within the first three months. Mr. Jonathan Hutchinson, one of the most reliable authorities on this subject, expresses his opinion in these words:—"The term '*congenital*' must not be held to imply that the inheritance is obvious at the time of birth, for it may easily be the fact that no signs of it become apparent until long afterwards."—See also his article in Reynold's "*System of Medicine*," where he mentions that the syphilitic taint may not show itself before the third month. Sir John Simon also refers to a case, which came under his own observation, where a simple surgical cut, in a child having latent in it the taint of hereditary syphilis, proceeded by ulceration to assume the ordinary characters, and require the specific treatment, of a syphilitic sore.

In these circumstances, where there are advantages and disadvantages in vaccinating under three months from birth, the Central Board of Health would be glad of an expression of opinion from the Medical Society, as the Health Bill is now before Parliament.

Dr. Plummer would have been present to give his views and experience to the Society, but his health prevented him venturing out at night.

Dr. Ford, who had also much experience in vaccination matters, was unable to attend on this occasion ; but he was of opinion that the best time was before teething, from two to six months after birth.

Dr. TWEEDDALE, speaking as a member of the Central Board, said that there was a great difference between England and the Colonies, in that small-pox was always present in England, but was not in the Colonies. Further, public opinion must be considered. By many, compulsory vaccination is not liked now, and if it be made more stringent, there would, most likely, be stronger objection.

The Secretary then read letters from Dr. Pincott, of Geelong, and Dr. Penfold, of Sandhurst, both of whom were opposed to any change.

Dr. DUIGAN, a public vaccinator of two year's standing, was opposed to any change, chiefly because vaccination would be too much for young children in the hot months. He had twice seen convulsions from vaccination. He would prefer, as a rule, not to vaccinate till after the fifth month.

Dr. NEILD said that, until about twenty-five years ago, three months was the age limit ; but at that time, he was one of a deputation that waited on the Attorney-General of the day, with a view of extending the time to six months, which was done. The chief objection then made to the earlier age was the trouble that was so apt to arise in the hot months. This arrangement has acted well ever since, and there does not appear to be any good reason for a change.

Dr. MACGIBBON, who was a public vaccinator, thought that it was merely a question of expediency ; but he agreed with all Dr. Plummer's reasons for a change. A number of children are now vaccinated in the summer, and he failed to see that making the age limit three months would make any difference in that respect. He thought that one-third of the children brought to him were vaccinated through pressure by the police ; if the law were made any more stringent, the people might rebel against it.

Dr. JOYCE had vaccinated many children here and in Adelaide. He thought that the sooner a child was vaccinated after six weeks the better. In hot weather, a certificate of unfitness can be given.

He did not think that vaccination was so successful in very hot, or even in very cold, weather.

Mr. J. P. RYAN was against any change. The danger of inherited syphilis appearing after vaccination was enough to stop any medical man vaccinating earlier. He would not care, on this account, to vaccinate until after three months.

Dr. A. A. FLETCHER stated that his father, as a public vaccinator of thirty year's standing, was opposed to any change.

Dr. WILLIAMS thought it would be a mistake to limit the age, and that it was desirable to conciliate the public as much as possible in the matter. He pointed out that the population of Dr. Plummer's district—Port Melbourne—was a very migratory one.

Dr. ASTLES thought that the present Act answered very well.

Dr. JAMIESON thought the balance of evidence distinctly in favor of keeping the age as at present. He thought there was very little in Dr. Plummer's reasons. The first two simply amounted to saying that the child was quieter when vaccinated early. He thought very little of the argument about the trouble during dentition, more especially up to six months. Another point not yet mentioned was that the mortality of children under three months was very high; and as mothers are very apt to ascribe every illness occurring after vaccination to vaccination, this great mortality among children under three months should deter us from making any change. The point about syphilis was also a very strong one. Therefore he would move that, "in the opinion of this Society, there is not sufficient reason for altering the law as it now stands."

Mr. SYME seconded the motion. Admitting that there were advantages in vaccinating early, the matter might well be left to the discretion of vaccinators. Hereditary syphilis undoubtedly does sometimes make its appearance after three months. Only yesterday, at Hospital, a child six months old (whose mother was under treatment for syphilis) was shown to him, with well-marked inherited syphilis, and the mother was positive that there was no sign of anything a month ago. The child had not been inoculated from the mother after birth.

The PRESIDENT, after summing up the arguments briefly, put the motion, which was carried unanimously.

Dr. JAMIESON then raised the question as to whether the Society, by giving an opinion on this particular question, might

not be taken to agree to all the rest of the Public Health Bill. He therefore proposed that "this meeting remit to the Committee of the Society the consideration of the Public Health Bill now before Parliament." This was seconded by Dr. Joyce, supported by Dr. Neild, and carried.

The following paper was then read :—

CASE OF EPITHELIOMA OF THE PENIS.

By R. A. STIRLING, M.B.

Surgeon to the Skin Department, Melbourne Hospital.

Cancer of the penis seems to be somewhat infrequent compared to other organs. I can find records of only three cases operated on at the Melbourne Hospital during the last ten years—all three being over fifty years of age, and one a man of colour. In private practice, I have seen occasionally cases which I took to be pre-cancerous conditions—such as suspicious warts in elderly men ; dry, glazed ulcers, lingering for months, and having all the characters of chancroid, except for their dryness and persistence.

The disease in this and neighbouring organs, such as the lower end of the rectum and the scrotum, appears to run a more tedious course than elsewhere. The subject from whom this specimen was taken had noticed a small papule on the dorsum of the prepuce—the head of which he frequently scratched off—two years before applying for treatment ; and when he came to the out-patient room it was rather for a chronic eczema which annoyed him, than for the vegetating though painless growth which had replaced the prepuce, and invaded the spongy body. He is aged 54 years, is married ; had never suffered from syphilis, but had gonorrhœa once in youth. He was employed as fireman to a brick-yard, and attributes the growth of the wart to the sudden changes of temperature that part of his body was exposed to while feeding the furnaces. Latterly, there had been an offensive watery ichor draining away from the tumour, but through most of its course, it was dry.

June 17, 1889.—I amputated the penis near its base, according to the method described in Jacobson's work, a much to be preferred plan to the ordinary excision. This flap amputation secures a natural covering to the exposed corpora cavernosa, and prevents the delay and irritation which healing by granulation entails. The urethra was, however, brought through the lower and not through the upper flap, and was stitched there with

several points of suture to the skin. Union occurred throughout by first intention, with little or no trouble in micturition, and he left the hospital in a week, with the wound healed.

I have to acknowledge the courtesy of Dr. Charles Ryan for giving me a bed for this patient.

Mr. F. D. BIRD said it was very important to examine the corpora cavernosa, and if they were affected they should be removed completely, bringing the urethra out into the perineum.

Dr. BALLS-HEADLEY remarked that the rarity of such affection was interesting, as they were much commoner when men and boys went up chimneys so frequently.

The rest of the business was postponed.

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MEETING.

Wednesday, 31st July, 1889.

(Hall of the Medical Society, 8 p.m.)

The President, Dr. FISHBOURNE, occupied the chair. There was a good attendance of members. The minutes of the last meeting were read and confirmed.

The PRESIDENT announced the election of Wm. Mayne Clayton, L.R.C.S.I., L.K.Q.C.P.I., Resident Medical Officer, Women's Hospital, as an ordinary member of the Branch.

The following paper was then read :—

TWO CASES OF POISONING.

By J. W. SPRINGTHORPE, M.D.

Physician to the Melbourne Hospital.

The following case of recovery, after taking a very large quantity of atropine, is introduced, as raising several very important points in toxicology :—

P. M., æt. 52, a chemist by profession, had been drinking brandy to excess for some months. About 7.30 a.m., on the 8th of June, he took gr. iv. of atropine, in the form of liq. atropinæ sulph. Shortly after he was seen by a medical man, who gave him an emetic. More or less of the stomach contents were evacuated, but patient, continuing to get worse, was sent to the

hospital, where he was admitted at 10.30. He was then in a comatose condition, the breathing stertorous, the pupils dilated and insensitive; the face flushed dull red, but the rest of the body unchanged in colour; general sensation was not absolutely abolished; pulse rapid and running, and hands and feet tending to become cold. Without delay hypodermic injections of pilocarpine, morphia, ether and caffein were prepared, and the stomach pump and battery sent for. As the symptoms were severe, and only hearsay evidence existed as to previous use of emetics, the stomach was washed out with the stomach pump, and about a quarter of a pint of discoloured fluid removed. Unfortunately, this was thrown away without examination. About half a pint of hot strong coffee was then introduced by the stomach tube, and half a grain of morphia injected hypodermically. Meantime, strong cutaneous stimulation was tried, first with the hands, afterwards with the faradic current for a short time, and caffein cit. gr. j. was hypodermically injected. Coma, however, became more profound, and the pulse began to intermit once in every five or six beats. The use of the battery was abandoned. Hot bottles had already been applied to the legs, &c., and ether 3j was now injected hypodermically. At the end of an hour the pulse was still intermittent, and beating 120 to the minute, the respirations being eighteen to the minute. The breathing, however, was less stertorous, and general twitchings of the limbs were observed. *Ol. crotonis m. ij.* was then placed on the back of tongue, followed later on by a turpentine enema, when it was found that the oil was not acting. (It was only the following day, and after *haust. dom. alb. 3 ij.*, that the bowels were opened). A catheter was also passed into the bladder, but the urine was found to be suppressed. Patient was kept warm, and the *hst. ether ammon.* given every two hours.

At 8.30 p.m. he could be roused with some difficulty, but only to sensori-motor actions. The pupils were unchanged, despite the morphia; there were general muscular twitchings, but no scarlatina-like rash on the trunk or extremities. A great change, however, had come over the circulation, the pulse being now full and bounding. To promote diuresis, the *hst. pot. acet. c. scopario* was ordered every four hours, and *digitalis* fomenta applied over the loins and bladder.

On the following morning, he passed a large quantity of urine into the bed, and *hst. dom. alb. 3 ij* was ordered, to open the

bowels. Patient, about this time, entered into a state similar to that usually present in the early stages of atropine poisoning. He became very delirious, with violent muscular movements and hallucinations. Thence onwards he continued to improve, and his symptoms are of interest, only as showing the continuance or cessation of the poisonous influence. In the afternoon, the bowels were well open.

Next day, the 10th, he passed his water well, and seemed fairly sensible.

On the 11th, the pupils were still dilated and insensitive, but he could read a little; when reading aloud he read slowly, like a child spelling. There was increased muscular movement on the least excitement. There was no diplopia; the pulse was eighty-eight; the tongue large, tremulous and clean.

On the 12th, aperients were still necessary, and the urine was still not well passed without the hst. pot. acet. c. scopario.

On the 14th, he could read the newspaper at a distance of three feet, but not nearer; the pupils reacted slightly, but could not be made to contract to the normal size, and the right was larger than the left. The throat was sore from the pump, &c.

He was discharged on the 17th, the pupils being still dilated, and vision not yet normal, but otherwise practically well.

Taking m. ij as the outside medicinal dose of liq. atropinæ sulph., this patient took 220 times the quantity permissible.

In the *British Medical Journal* for May 11th, 1889, is recorded a case of recovery after taking three and a half grains; this is the nearest approach in point of quantity to the present case that I can find reported. In this latter case, the patient was seen, and the stomach completely emptied within a quarter of an hour. Her symptoms resembled those of the present case, but she does not seem to have been so nearly moribund, the pulse remaining regular, and beating seventy to the minute. Insensibility, however, lasting nine hours, followed, as in the present case, with the busy delirium which ushers in recovery. Of course, it is impossible to say how much of the drug is absorbed in these cases, where vomiting is produced shortly after its ingestion. Still the preparation used was very soluble, and the after symptoms proved conclusively that a large quantity must have entered the circulation.

A more practical point, however, than that of dosage, is—What should be done under such circumstances? Certainly the present

case recovered under active treatment, but did it recover owing to that treatment, or in spite of it? It is so easy in medicine to mistake the *post hoc* for the *propter hoc*. Analysing the treatment adopted, it must be remembered that the patient came under observation when far advanced in the paralytic stage. The increased frequency of breathing, the active talkative delirium, the scarlatina-like redness of the skin, the full bounding pulse, the muscular excitement which mark the exhilarant stage, were all absent, and in their place we had stupor, rapid weak pulse, cold extremities, and abolition of various functions. The danger was distinctly that of cardiac failure, the paralyzing action of the drug being, apparently, mainly exerted on the terminal inhibitory filaments of the vagus, distributed to the cardiac ganglia. This suggested a definite line of treatment, viz., that of cardiac stimulation. Pilocarpine was, in my opinion, contra-indicated. It may be, and probably is, of service in those stages of atropine poisoning, where the stimulant effects preponderate, but in the paralytic stages, it is far too uncertain a drug as to dosage, &c., and its irritant effects are soon followed by a paralysis of the terminations of the inhibitory fibres. Morphine, on the contrary, stimulates the peripheral ends of the vagi, besides counteracting to some extent many other effects of atropine. A medium dose, therefore, under the circumstances (gr. $\frac{1}{2}$) was tentatively administered. Subsequent treatment was directed to still further stimulate cardiac action. Strong faradic currents were applied to the skin generally. It certainly seemed as if the pulse became intermittent under their administration. Whether this was a sign of their stimulating a half paralysed vagus, and so beneficial, or the reverse, cannot be decided with certainty—probably the former. Still, as a precaution, their use was discontinued. Coffee, however, had been previously placed in the stomach, and caffein injected hypodermically; in doing so, we followed the routine treatment recommended by many good authorities. I am of opinion, however, that it would have been better to have omitted the caffein. Experiments seem to show that it does not prevent inhibition, but increases the frequency of the pulse, and produces irregularity of heart action. Much, then, of the subsequent irregularity may perhaps be laid to its door. The hypodermic use of ether, and the repeated doses of ether and ammonia, seemed to have been distinctly beneficial, and the means adopted to counteract the complete paralysis of the intestines, and the suppression of urine,

proved sufficiently efficacious. The removal of the urine, of course, was especially important, since re-absorption has been known to produce fresh poisoning.

The second case—one of poisoning by chlorodyne—is similarly suggestive :—

A. H., æt. 26, was admitted to the hospital at 8.40 p.m. on July 1st. Subsequent investigation showed that he had taken between three and four drachms of chlorodyne (Collis Browne) twenty minutes before admission. When first seen he was unconscious, face livid, pupils contracted, equal and insensitive. There was no stertor. He could not be roused. The stomach was emptied, and half a pint of hot coffee thrown in by means of the pump. The Resident Physician believing, from report as well as symptoms, that patient had taken laudanum, injected atropine, first $\frac{1}{16}$ gr., then twice $\frac{1}{8}$ gr.—in all, $\frac{1}{4}$ gr.—without any improvement or alteration, except that the pupils dilated to half their radius. The interrupted current was then applied, with some improvement in the general conditions. Respirations were now 8 per minute, pulse 140, and regular. Artificial respirations were then resorted to. It was at this stage that I saw patient. From his general symptoms, I concluded that he was suffering rather from a poison like chloral than opium, though chloral alone scarcely explained everything. Death seemed imminent from both apnoea and cardiac failure, and the problem was to stimulate both heart and respiration. Five different means were employed to secure these ends—artificial respiration, cutaneous stimulation, injections of ether and strychnine, and inhalations of nitrite of amyl. In addition, he had hot flannels and hot bottles applied to the armpits, thighs, and soles, his temperature being only 95°. Without the artificial respiration, he would undoubtedly have died. By Sylvester's method, the general lividity of the face and neck could be replaced by a less unnatural colour, and respirations would follow spontaneously at the rate of 6, 8, or even 10 per minute, only, however, to cease when artificial assistance was temporarily abandoned. The faradic current seemed to have little effect, but slapping the face sharply with the hand was frequently followed by deep inspirations. Not uncommonly when the breathing improved, the heart's action failed. It was to counteract this failure that ether was injected hypodermically five or six times, in small doses of fifteen to twenty drops, with noticeable improvement in

the pulse. As a special stimulant to the respiratory centre, as well as the vaso-motor and cardiac centres, strychnine was also injected hypodermically four or five times, in doses of m. ij-iv. of the liq. strychninæ. Later on, when the foregoing had acted to some extent, a nitrite of amyl capsule was broken and held to the nose, to assist the cerebral circulation. The following notes will show the progress of the case:—

12.25 a.m.—Breathing now improved; artificial assistance unnecessary; tips of the ears still livid, but lividity disappeared from face and lips. Temperature still 95°.

1.40 a.m.—Temperature 97°. Artificial respirations again required; mustard poultices applied to calves. At times breathing fairly well, respirations then being seven per minute.

2.20 a.m.—Breathing shallow, but fairly regular and quiet—eight per minute; pulse quick, regular, but weak.

3 a.m.—Respirations nine per minute. Eyes opened; slight conjunctival reflex obtained. Soon after could answer questions, but relapsing into unconsciousness, if not constantly stimulated by smacking the face, &c.

Next morning he seemed quite well, though weak and disinclined for any exertion. A few days afterwards he was discharged.

Assuming fifteen drops as the maximum adult dose, this patient took more than twelve times such quantity of chlorodyne, the active principles of which are chloroform, prussic acid and morphia, with a less quantity of ether and other inactive ingredients. The complex nature of the poison was very noticeable in the symptoms. The quickness with which the pupil responded to atropine, and the absence of stertor, with the presence of so marked cardiac failure, led me to exclude opium, as the sole or even main poison at work. Chloral was certainly more indicated—chloroform and prussic acid being, in fact, the main ingredients—and the case being urgent, was treated upon the indications, without seeking for a more refined diagnosis. The combined result, however, was so characteristic, that I think it possible in future to differentiate chlorodyne from other poisoning.

As to the treatment adopted, I am again inclined to doubt the efficacy of trusting to physiological antagonists. No good seems to have followed the administration of atropine. On the other hand, treatment by recognised means of obviating the patent

tendencies to death seemed entirely successful. No doubt the continued performance of artificial respiration was the main agent in averting a fatal issue, but the value of ether hypodermically in counteracting syncope, and of strychnine hypodermically in stimulating narcotised respiratory centres, was again abundantly evident. Stimulation of the fifth cranial nerve, as is well-known in the treatment of chloroform narcosis, and as I have always found when relying on the production of simple cortical anaesthesia in dental and throat operations, proved a valuable cardiac and respiratory excitant.

Dr. FISHBOURNE referred to the variable composition of chlorodyne. With regard to the use of the stomach pump, he pointed out the importance of being certain that there was fluid in the stomach before attempting to remove any, in fact, that a real washing out of the stomach should be made.

Dr. MAUDSLEY referred to the importance, in severe cases of alkaloidal poisoning, where death, in spite of ordinary treatment, seemed imminent, of bleeding the patient and then injecting into the veins a neutral saline solution; in this way a portion of the poison was removed, and what remained was diluted.

Mr. RUDALL agreed with Dr. Maudsley about the importance of injecting neutral salt solution. He referred to its advantages in poisoning by corrosive sublimate. In his opinion, it possessed certain advantages over the transfusion of pure blood or defibrinated blood, there being none of the dangers of thrombosis.

Dr. SPRINGTHORPE replied. He referred to the great advantages of repeated subcutaneous injections of æther, about twenty minims at a time, and to the value of strychnia in such cases.

The following paper was then read :—

INJURY TO THE KIDNEY, WITH PROBABLE RUPTURE OF THE URETER.

By C. S. RYAN, M.B. Ed. et. Melb., Ch. M. Ed.

H. S., selector, living at Poowong, Gippsland, aged 53, admitted to Melbourne Hospital November 12, 1888, under Dr. MacInerny. Patient states that a month ago he was thrown from his horse, and fell on his right side, bruising it badly. For two days after his accident he passed blood in his water; it, however, became clear in two days. He got about on sticks for three weeks, but felt very unwell during that time. He has not passed a comfortable night since the accident. Three days ago his left leg

began to swell, and became numb: he has pain along the inner side of his thigh, and also in the left groin. On examination, there is solid œdema of the left leg, which is pale in colour, and marked tenderness along the course of the internal saphena vein; also pain in the groin on pressure. There is a distinct hard swelling in the right abdomen, from the mid-line outwards, dull on percussion, and tender on pressure.

November 17.—Patient thinks that the swelling is less than it was; tongue coated; bowels are open; some clear fluid was drawn off with a hypodermic needle. On microscopic examination, a few red and white blood corpuscles were seen. The fluid did not coagulate on boiling.

November 21.—Swelling on right side becoming harder and more permanent; œdema of leg increasing. Urine sp. gr. 1030, clear; no distinct albumen.

November 26.—Patient transferred to Mr. C. S. Ryan. At this time both legs were swollen and œdematous, but especially the left; face bore a somewhat pasty appearance. There is a tense hard swelling, occupying the right half of the abdomen and flank, extending up beneath the false ribs, and down into the pelvis, and back posteriorly towards the spine. Deep-seated fluctuation can be felt, and it is tender on pressure; the right leg is partially flexed; the dulness is not altered by change of position. Urine, sp. gr. 1022, containing albumen.

December 11.—The swelling has much increased; urine is scanty. As his symptoms were becoming urgent, I decided to aspirate. I did so, and drew off about 170 ounces of straw-coloured fluid; it had no urinous smell, and looked like serum. This was handed over to Dr. Mollison. Unfortunately no report was made, but I received last week a letter from Dr. Mollison, who states that he cannot remember whether it contained albumen or not, but he is sure that it did not contain urea. The removal of this amount of fluid gave very considerable relief—he was able to extend his leg, and the œdema subsided—but within a few days the enlargement of the abdomen became greater than ever, and it became apparent that something more radical in the way of treatment was necessary, as if nothing were done, there was considerable risk of the fluid bursting through the peritoneum into the abdominal cavity. Accordingly, assisted by Dr. Syme, I cut into the swelling by an incision four and half inches in length, midway between the last rib and the crest of the ilium. A large quantity

of straw-coloured fluid gushed out, and I was then able to pass my hand in, and I found the kidney standing out in the middle of a large cavity. It appeared to be somewhat larger than normal, and the peritoneal covering was pushed forward. I passed my hand up under the diaphragm and down into the pelvis, the peritoneum being pushed forward, across, and beyond the mid-line of the abdomen. I was unable to discover any rent in the kidney or its pelvis; the vessels and ureter appeared to be thick and hard. The cavity must have contained quite 200 ounces of this fluid. No thickening or fibrous deposits could be felt in the cavity, except around the entrance of the vessels to the kidney. The fluid that came away was clear from first to last—it was never brown or blood-stained, and no clots or deposited fibrin could be made out. The fluid had no urinous smell. Two large drainage tubes were inserted, the cavity was syringed with a warm perchloride solution (1 in 2000), and the wound was closed with silver sutures. The day following the patient felt much better. There was a considerable quantity of discharge, not smelling of urine. He continued to progress very favourably for the next few days. The cavity contracted down, and the discharge continued clear, but mixed with a small quantity of pus, which apparently came from the edges of the wound. On the 29th, eight days after the operation, it was noticed that in the morning his bed, as also the dressings and bandage, was soaked with urine which had been flowing through the drainage tubes. My attention was called to this by the nurse, for up to this period the discharge had been daily becoming less, and indeed it did not amount to more than an ounce in the twenty-four hours. The swelling of the right leg had now entirely disappeared, the pressure having been taken off the iliac veins. The next day the discharge was very slight, and had no urinous smell, but was the same as before the discharge of urine from the wound.

On January 18th, the wound had almost healed, when another profuse discharge of urine took place; after this it gradually closed, and on February 4th, patient was allowed to go home with a slight discharging sinus.

Six weeks later, I received a letter from him stating that the sinus had completely healed, and that he was in perfect health.

Such are the very meagre notes of, to my mind, a most interesting case. It is greatly to be regretted that the notes are of so poor a character as to rob the case of its scientific interest.

The case is a puzzling one, and as I have great difficulty in arriving at any definite conclusion with regard to it, I have brought it under your notice. In the first place, we have a direct injury to the side, followed by the passage of a quantity of blood per urethram, and probably from the kidney; then we have the accumulation of fluid in the flank, which on analysis contains no albumen, which would negative the idea of its being simply serum; but on the other hand, on examination for urea, none was discovered by Dr. Mollison. It does not follow that because the odour of urine was absent, that therefore it could not be urine. There are several cases recorded where there was absence of the smell of urine in fluid which was afterwards proved to be urine. The percentage of urea you would expect to find in urine which had been passed under high pressure would be very small. Experiments on dogs have proved beyond all doubt, that when the ureter has been ligatured, and when consequently the pressure on the kidney has been increased, that urine passed has always been of low specific gravity and containing a very small percentage of urea. If this fluid had been simply serum, would you not have expected, when the cavity was opened, to have had a dirty-coloured discharge with the passage of fibrinous clots? or, would sufficient time have elapsed for absorption of the fibrin to have taken place? There is a case reported in the *Medical and Chirurgical Review*, No. 66, which bears so close a resemblance to this case that I am tempted to give you full notes of it (Mr. J. Marshall's case).

A girl, aged 13 years, was knocked down by a spring cart, which is said to have passed over her abdomen. She was unable to stand, and complained of severe pain in her left flank. She was carried home, and remained in bed one month, during which period the pain became less, though it did not entirely disappear. At the end of that time, she was able to walk about the house until August, five months after the accident. In December, nine months after the receipt of the injury, she was admitted into University College Hospital. There was not at any time a history of hæmaturia. On examination, patient was lying on her right side, with her legs drawn up, pale and anæmic anxious expression, and much emaciated. She complained of great pain in the left lumbar region, which was much distended, occupying half of the left abdomen; it was exquisitely sensitive to touch; tongue was furred; temperature 103°; pulse 128; urine scanty and high

coloured. Three days after admission, the tumour was tapped, and five ounces of yellow-brown odourless fluid was drawn off; when heated, this emitted a strong urinous odour, and yielded a heavy flocculent albuminous precipitate. It contained 0.55 per cent of urea; on bile reaction. Great relief followed this, and temperature fell to normal; eight days later, pain and temperature returned, tumour became more painful and tense than ever. Accordingly a large trochar, one-third of an inch in diameter, was introduced. Thirty-six ounces of chocolate-coloured fluid was drawn off. The cannula was left in, and a tube introduced through it. The whole operation was done under the spray. Next day temperature fell to normal standard, and the pain almost ceased. Then ensued a profuse discharge of a brown-red colour, having the appearance of broken down clot. During the next seven days, the discharge consisted of pus, mixed with brown-red fluid. On the tenth day, while the dressing was being renewed, two ounces of urine gushed out, followed by a small quantity of pus. No urine subsequently escaped, and from this time the patient made a slow but uninterrupted recovery. Five months after her admission, the patient was discharged cured.

The diagnosis made in this case was traumatic hæmatoma, which had undergone incomplete absorption, and had ultimately suppurated. The sanguineo-purulent character of the chocolate-coloured fluid drawn off confirmed the notion of its being a suppurating blood tumour, whilst the urinous odour detected on boiling that fluid, the fact of its containing half per cent. of urea, and the curious gush of clear urine which escaped during one of the dressings, pointed to a superficial laceration of the kidney itself.

Taking everything into consideration in my case, I am inclined to think that it has been a case of hæmatoma surrounding the kidney leading to the formation of a large cavity, the walls of which secreted serum; and there must also have been some slight laceration of the pelvis of the kidney or the ureter, as evidenced in the first instance by the passage of the blood, and conclusively by the escape on two occasions of urine through the wound. The complete and rapid cure of the case is of great interest.

Mr. SYME had seen the case referred to, and was much interested in it. As the fluid had not been analysed after the second tapping,

it was almost impossible to be certain of the diagnosis, but he could not altogether agree with Mr. Ryan's view. He thought it more probable that the cyst was a hæmatoma, consequent on a slight rupture of the kidney. He had seen a case of ruptured ureter in a child, when in London, similar to the one recorded by Barker.

Dr. MAUDSLEY had seen the cases referred to by Mr. Ryan—Mr. Marshall's and Mr. Barker's. In Mr. Marshall's case there was some little doubt whether the cyst was connected with the kidney or not, the percentage of urea in the fluid, 0.055, and not 0.55, being so very small. With regard to Mr. Barker's case, there could be no doubt about the case. In that case the kidney was removed on account of the non-closure of the urinary sinus. He had doubts about the ureter in Mr. Ryan's case having been torn across, chiefly from the fact that the wound healed, leaving no urinary fistula. Probably there had been a rupture of the kidney, which, since the operation, had healed.

Dr. SHIELDS then read a paper, entitled—"At what age should vaccination be performed?" (This paper is reported with the proceedings of the Medical Society of Victoria.)

Dr. TWEEDDALE, Mr. RUDALL, Mr. SYME, Dr. SPRINGTHORPE and Dr. JOYCE discussed the matter, and were of opinion that it would be unwise to change the present law, at any rate, until the report of the Royal Commission on Vaccination, in England, was published.

Dr. SPRINGTHORPE exhibited a hydatid cyst in the left lateral ventricle of the brain.

Victorian Medical Benevolent Association.

The annual meeting of the above Association took place in the Hall of the Medical Society, on Tuesday evening, July 30th. The President, Dr. CUTTS, occupied the Chair.

The first business was the submission of the report of the Committee, which was as follows:

REPORT OF THE COMMITTEE.

The termination of the twenty-fourth year of existence of the Medical Benevolent Association shows, as usual, a prosperous condition of the institution, and the customary increase in the amount

of the permanent fund. The demands made upon the Association have been considerably more numerous than in former years, but as most of these have been found on investigation to be unwarrantable, the amounts granted have been about the average. And it is at this point where the utility of the Association will be discovered to be so manifest, namely, in relieving the profession from compliance with those numerous solicitations of which we all have constant experience. It would appear as if the class of persons, who systematically and persistently subsist upon the charitable contributions of their more thrifty fellow-citizens, were every year increasing. They have recourse to every kind of expedient to relieve themselves from the necessity of earning their living, and they are unwisely encouraged in this habit of mendicancy by those who, heedlessly, or out of excess of sympathy, comply with their demands. The Charity Organisation Society has probably done something towards checking the flow of indiscriminate alms-giving, but the arrest is only partial; and it is well-known that the members of every profession are every day applied to for relief by persons who live and thrive upon imposture. It is to be repeated, therefore, that in addition to the direct benefits conferred by the Medical Benevolent Association, it furnishes a convenient reply to those chronic suppliants who, without self-respect, never hesitate to beg, and to accompany their petition with statements which a very little investigation shows to be untrue. The question is however very properly asked, if the bulk of the applications come from impostors, and there is a continual surplus of income over expenditure, for what purpose is the permanent fund intended? It is growing year by year, and the interest of the invested sums adds to its bulk, instead of being devoted, according to Rule XIV., to the relief of the widows and orphans of subscribers. It is a source of satisfaction to be able to say that, up to the present, there has been no application from any persons coming within the provisions of this rule; but, as has been before remarked, the promoters of the Association have always looked forward to the probability of such demands being made, with every justification. The permanent fund strictly represents the principle of laying up for a rainy day; and the longer the Association lasts, and continues to be conducted as it is at present, the better prepared we shall be to meet such cases when they present themselves.

It has been suggested that the interest of the permanent fund might probably be devoted to annuities to worn-out or disabled

practitioners, and probably some such extension of the benefit might be conceded ; but it is not unreasonable to insist, that the condition of such allowance should be that the annuitant had subscribed to the funds of the Association for a prescribed period. It has been found, however, that when relief has been sought by elderly medical men, they have never at any time contributed to the fund. It seems, therefore, inevitable, for the present at least, that the permanent fund should go on increasing. Some quite unexpected large augmentation of it might prompt the trustees to propose a scheme with larger purposes than is at present possible ; but at present, it seems preferable to be content with the moderate aims that have been contemplated. The Committee, however, think it only just to themselves to say that no deserving application has, to their knowledge, ever been disregarded ; and they are equally certain that the distresses of the majority of the applicants have been the result of their own neglect, excess, or improvidence.

CASES RELIEVED.

The following grants have been made :—

1. £10 to the widow of an L.A.H.D., who for some years practised in Victoria. The widow is now in Ireland, and was stated to be in distress.

2. £2 10s. to a lady (the daughter and sister of medical men, neither of whom had practised in the colony) who was being assisted to return to England, after being unable to obtain employment in Victoria. It was afterwards ascertained that she had obtained employment in Victoria.

3. £1 for casual relief to an M.D. Glas., some time practising in a remote locality in this colony.

4. £5 to the wife of an L.F.P.S.G. and L.S.A., formerly practising in the suburbs, and by whom she had been deserted.

5. £20 to an M.D. Jena, who, after a long residence in Victoria, had become old and disabled.

6. £5 to the widow of an M.R.C.S. Eng., to enable her to meet some temporary difficulties. This lady had been several times previously relieved.

7. £5 to the widow of an M.D. St. And., to permit of her tiding over an unexpected demand. This lady had also been previously relieved.

8. £5 to an M.D. Aber., to help him to proceed to a locality in the country where he contemplated commencing practice.

There have been five meetings of the Committee during the year, the attendance being as follows:—Dr. Cutts, 1; Dr. Jonasson, 3; Mr. Rudall, 2; Dr. Jamieson, 4; Dr. Neild, 5; Dr. Graham, 0; Dr. Williams, 0; Dr. Jackson, 0; Dr. Ryan, 0; Dr. Haig, 5; Mr. FitzGerald, 0.

After a brief conversation, the report was adopted.

THE TREASURER'S REPORT.

The cash account was then submitted as under:—

THE HON. TREASURER IN ACCOUNT WITH THE VICTORIAN MEDICAL BENEVOLENT ASSOCIATION.

FOR THE YEAR ENDING JUNE 30, 1889.

Dr.

To Balance from 1887-88	..	..	..	..	£252	9	1
Fixed Deposits Paid	..	..	..	..	1150	0	0
Interest on Stock and Debentures	..	..	..	..	22	8	0
" Fixed Deposits	..	..	..	..	53	10	0
" Current Account	..	..	..	..	4	4	1
Donation, Mrs. D. R. Long	..	..	..	..	10	10	0
Subscriptions	..	..	..	..	107	2	0
					<u>£1600</u>	<u>3</u>	<u>2</u>

Cr.

By Fixed Deposits	..	..	..	..	£1400	0	0
Grants	..	..	..	..	53	10	0
Collector's Commission	..	..	..	..	10	16	0
Printing &c...	..	..	..	..	5	7	6
Bank Commission, &c.	..	..	..	..	0	7	0
Balance in Bank	..	..	..	..	130	2	8
					<u>£1600</u>	<u>3</u>	<u>2</u>

CAPITAL ACCOUNT.

Victorian Inscribed Stock	..	..	..	..	£500	0	0
Queensland Government Debentures	..	..	..	..	200	0	0
Medical Society Debentures	..	..	..	..	60	0	0
Fixed Deposits (Australian Deposit and Mortgage Bank)	..	..	..	..	1400	0	0
Savings Bank	..	..	..	..	66	9	3
Current Account (Australian Deposit and Mortgage Bank)	..	..	..	..	130	2	8
					<u>£2356</u>	<u>11</u>	<u>11</u>

Audited and found correct, and Securities examined,

July 29th, 1889.

P. B. BENNIE.

This, after a brief discussion, was adopted.

BB 2

A letter from Dr. Jamieson was then read, resigning his position as Treasurer, and the following motion was thereupon carried:—
 “That the resignation of Dr. Jamieson, as Treasurer of the Victorian Medical Benevolent Association be accepted with an expression of regret, and with cordial thanks for the services he has rendered to the Association.”

The Honorary Secretary brought up the subject of registering the Association under the Friendly Societies' Act, or of taking such steps as may determine the security of the funds from mal-appropriation. It was eventually resolved that the President and Secretaries be and are hereby instructed to make inquiry as to the best mode of effecting the legal security of the Association.

The subjoined list of contributors was submitted:—

LIST OF SUBSCRIBERS OF ONE GUINEA, FOR 1888-89.

Adam, G. R.	Fyffe, B.	O'Brien, J. W.
Alsop, T. O. F.	Graham, D.	O'Hara, H. M.
Anderson, J.	Grant, D.	Owen, F. J.
Annand, G.	Haig, W.	Penfold, O.
Armstrong, G. A.	Heffernan, E. B.	Peipers, F.
Backhouse, J. B.	Hewlett, T.	Pincott, B.
Balls-Headley, W.	Hodgson, T.	Ramsey, J. K.
Bennie, P. B.	Honman, A.	Rankin, W. B.
Bird, F. D.	Hooper, J. D.	Reid, J.
Bird, S. D.	Horne, G.	Robertson, J.
Bowen, A.	Iredell, C. L. M.	Rudall, J. T.
Bryant, H. W.	Irwin, A.	Ryan, J. P.
Burke, S. J.	Jackson, James	Ryan, C. S.
Burton, W. H.	Jakins, W. V.	Schleicher, C.
Büttner, A.	Jamieson, J.	Shields, A.
Carstairs, J. G.	Jonasson, H.	Simmons, E. L.
Clendinnen, F. J.	Kenny, A. L.	Smith, W. B.
Cooke, J.	La Mert, L.	Smith, C.
Courtenay, H.	Le Fevre, G.	Smith, L. L.
Cox, J.	Lempriere, C. (jun.)	Snowball, W.
Crossen, H.	MacInerney, J. R.	Springthorpe, J. W.
Cutts, W. H.	Mailer, M.	Stewart, D. E.
Davenport, A. F.	McCarthy, C. L.	Stewart, W.
Dick, T. T.	McColl, D. S.	Syme, G. A.
Dowling, F. J.	McCreery, J. V.	Thomson, G.
Duigan, C. B.	M'Crea, W.	Thomson, M. B.
Duret, C.	McLean, H. R.	Talbot, R.
Fetherston, B. H.	McMillan, T. L.	Travers, G. F.
Fitzgerald, T. N.	McMullen, H.	Walsh, W. B.
Ford, F. T. W.	McMullen, J. C.	Webb, J. H.
Fishbourne, J.	Meyer, F.	Whitcombe, W. P.
Fisher, A.	Miller, J. J.	Williams, D. J.
Fletcher, E.	Moloney, P.	Williams, J.
Flett, W. S.	Moore, W.	Zichy-Woinarski, G.
Francis, H.	Neild, J. E.	H. S.
Figg, E. G.		

DONATION.

Mrs. D. R. Long £10 10 0

OFFICERS FOR 1889-90.

The election of officers for the ensuing year was then proceeded with, the following being the result:—President—Dr. Cutts; Vice-Presidents—Dr. Jonasson and Mr. Rudall; Treasurer—Dr. Cutts; Joint Honorary Secretaries—Dr. Neild and Dr. Graham; Members of Committee—Dr. C. S. Ryan, Dr. Haig, Dr. Kenny, and Dr. W. Moore; Auditors—The Hon. Dr. Le Fevre and Dr. Bennie; Trustees—Dr. Cutts, Dr. Neild, and Mr. FitzGerald.

Hospital Reports.

MELBOURNE HOSPITAL.

Case of Pityriasis Rubra.

Reported by W. MOORE, M.D., M.S.

A. H., æt. 60, commercial traveller, was admitted into ward 20 of the Melbourne Hospital, January 18th, 1887. Fourteen days previously he first appeared in the out-patient department, stating that for nearly two months he has been suffering from want of appetite, frequent attacks of vomiting, and pains in the shoulders. At that time, he was suffering from a bright-red rash all over the body, which faded on pressure; there was no trace of vesicles anywhere. The rash was first noticed two days previously on the arms; it then appeared on the chest, back and legs. It was very irritable, and, he says, "itched terribly."

On admission, the whole body, except the face, the palms, and the soles, was affected. The skin was dry and parchment-like, and covered with thin, light, branny scales. In the axillæ, the groins (especially the right), and at the umbilicus, there were slight moisture and redness. The backs of the hands were very little affected. There was slight infiltration of the skin at the back of the elbows. His breathing was laboured, chiefly diaphragmatic; there was not much air entering the lungs. Respirations 15 a minute. The pulse 100, weak. The tongue was smooth, slightly fissured, inclined to dryness in the centre. The bowels were freely open; very thirsty. Since the beginning of illness has been unable to sleep. Was ordered to have ol. morrhue rubbed in all over the body, and then to be wrapped up in blankets. To have some brandy through the night, and a draught of bromide, with digitalis.

January 19, 1887.—Pulse 96, weak. Respirations 20, laboured. Tongue smooth, dry in centre. Frequent cough, with sticky blood-stained sputa. Has diarrhœa. No urine could be obtained for examination. The ol. morrh. was absorbed by the skin as if by a sponge. The skin now looks much smoother and less like parchment. He slept heavily and continuously, moaning the while, after the draught of bromide and digitalis. He rapidly became weaker, and died on the night of the 19th January.

Autopsy.—Body emaciated, no dropsy; great post-mortem staining of dependent parts. Slight desquamation about the arms, forearms, thighs and legs; scaliness also of the scalp, and about the eyes. Redness and moisture were present at the umbilicus, and between the scrotum and thighs. There was very little subcutaneous fat. The blood was dark and very fluid. There was a large amount of fluid at the base of the brain. The membranes of the brain were œdematous; they separated easily, leaving gaping sulci. The ventricles of the brain were somewhat distended, and contained pale limpid fluid. The brain substance was not much altered in consistence. The lungs were distended, and inelastic anteriorly; posteriorly, they were consolidated, soft, and very friable, and contained a large amount of thin, dark, frothy fluid. The heart weighed fourteen and a half ounces; its right side was relaxed, and slightly dilated; the left ventricle was hypertrophied; its muscular wall was thick, rather pale, but not softened. Some atheroma of the first part of the aorta; the aortic valves were slightly rigid. Some thickening of mitral valves. The liver weighed fifty-five and three-quarter ounces; was pale, soft, friable, engorged with dark fluid blood. The sigmoid flexure of the colon was much thickened, and there were patches of pigment on the mucous surface. There was, also, considerable pigmentation of the rectum, but not so much thickening. The bladder was distended with urine, and reached more than half-way to the umbilicus. Both ureters were greatly distended (almost as large as a coil of small intestine). Each kidney was converted into a huge sac, containing pale, limpid urine. The cortical substance of both kidneys was greatly atrophied, simply forming the wall of the sac into which the kidney was converted. There was no stricture of the urethra; the lateral lobes of the prostate were enlarged slightly, the middle lobe not at all. The inner surface of the bladder was clean, pale,

and much reticulated. The orifices of the ureters were of normal size. There were several calcareous concretions, a little larger than a pea, at the base of the bladder, between the vesiculæ seminales. The urine was pale and limpid; its specific gravity was 1010; it became cloudy on boiling, but cleared on the addition of nitric acid. Numerous epithelial cells were seen under the microscope.

Australian Medical Journal.

AUGUST 15TH, 1889.

LEPROSY.

Dr. Shields has recently brought forward for consideration by the Medical Societies two subjects of great interest, both to the profession and to the public. The first of these was Leprosy, a disease which of late has been attracting much attention elsewhere, chiefly owing to certain accidental circumstances, such as the sensational death of Father Damien, and the distinguished patronage accorded to the Damien Memorial Fund—circumstances calculated to rivet popular attention.

From a purely scientific point of view, however, a more interesting subject for investigation would be difficult to find. Indeed, it is a reproach that the etiology of this widespread and terrible disease should still afford matter for discussion and the expression of such opposite opinions.

Leprosy seems to form, as it were, a link in a chain, the other links of which are syphilis, lupus, and tubercle—the infective granulomata, as they are termed by pathologists—and a careful study of leprosy, while desirable in itself, may, perhaps, in addition, help to elucidate some moot points in connexion with these diseases.

In its clinical manifestations, leprosy so closely resembles syphilis that, as pointed out by Dr. Shields, there is no little risk of mistaking the one for the other, cases of leprosy having actually been diagnosed as syphilitic by presumably competent

observers. There is also a slight resemblance in some of the tubercular forms of leprosy to lupus. Pathologically leprosy is closely akin to all three affections. Like tubercle, lupus and (probably) syphilis, it is associated with a specific bacillus. Its essential lesion resembles that of lupus and syphilis in being a growth of small round cells, while the addition of giant cells suggests its analogy with tubercle.

Then the disputed question of contagion has to be considered, and we naturally inquire what are the facts as to the contagiousness of all the members of the group. We find that evidence is wanting as to the inoculability or contagiousness of lupus; it must be very slightly inoculable, if at all. Tubercle is inoculable from lower animals to man, and *vice versa*; whether it is contagious from one human being to another, is still *sub judice*, but the weight of testimony seems to show that it is. When we come to leprosy, the difference of opinion is still wider. That it is inoculable from one human being to another seems fairly proved by the case of the convict Keanu, of Honolulu, who was inoculated by Arning on the 30th September, 1884, and manifested the initial lesion about three years afterwards. Up to the present inoculation experiments with lower animals have failed.

So far, therefore, there is a close analogy with syphilis, which, it is hardly necessary to state, is inoculable and contagious from one human being to another, but not to lower animals. The transmission of leprosy by contagion, however, is still hotly disputed. We think that a careful study of the history of the disease, and of the positive evidence adduced as to its transmission from the sick to the healthy, will convince an unprejudiced mind that leprosy is contagious just as syphilis is, though, perhaps, not quite to the same degree. One of the clearest cases of the transmission of leprosy by contagion is quoted in the *British Medical Journal*, of January 12, 1889. Up to the year 1849 leprosy did not exist in the small village of Parcent, province of Alicante. In 1850 one leper came to reside there, and from him the disease has now spread to sixty cases in this village.

One of the points to be cleared up by a scientific investigation has been suggested by Jonathan Hutchinson, viz., In what way is the transmission effected? Mr. Hutchinson believes that food, and especially fish, is the vehicle of contagion, and he certainly puts forward a very plausible argument in favour of his view. Admitting, however, fish to be the vehicle, is the fish infected from lepers, or does the fish form the natural habitat of the bacillus? If the former, the necessity for isolation of the leper still remains, and the facts that, as the result of strict segregation of those afflicted, leprosy entirely disappeared from England, and its prevalence in Norway has been diminished fifty per cent. in twenty years, point very clearly to the conclusion that the disease does spread from the sick to the healthy, directly or indirectly.

The question then arises, to what extent is the State justified in interfering with the liberty of the leprous subject, and insisting on his isolation? It has been already observed, that leprosy and syphilis seem to stand on pretty much the same footing as regards contagion, and the further question suggests itself, is it just to legislate for the one disease and not for the other?

In this colony the Health Act (1888) gives power to isolate lepers, on a certificate being signed by a health officer and two other registered practitioners. The discussion on Dr. Shield's paper revealed the fact that some regard this provision as unnecessary, and even dangerous. Perhaps the harsh treatment of bye-gone days is still associated with the idea of isolation, and renders it repellant, but there is no reason why segregation should not be carried out in such a manner as to be entirely conducive to the comfort and happiness of the sufferers. It seems hardly consistent to object to the isolation of this particular class of unfortunates, when it is remembered how many comparatively harmless lunatics are practically isolated, without any protest.

As before remarked, the history of leprosy seems clearly to show that when segregation was practised the disease could be stamped out, and when this measure was neglected leprosy spread widely. Placed as we are, in direct commu-

nication with countries where leprosy is endemic, and with cases already in our midst, it would, we think, be unwise to alter the existing law, except perhaps, in the direction of providing some additional safeguard, to ensure that by no mistake of diagnosis could a non-leprous individual be possibly isolated among lepers.

THE LEGAL AGE FOR VACCINATION.

The second subject, introduced by Dr. Shields, was the age at which vaccination should be performed. According to the law in this Colony, as is well known, every child must be vaccinated before the age of six months. Dr. Plummer, an old and experienced public vaccinator, has suggested that the age ought to be three months. Dr. Shields stated the case very fairly, and left the matter to the Societies to determine. Both Societies have independently expressed the opinion that it is not desirable to make any alteration in the existing law. It is unnecessary to reproduce the arguments used by members in support of this opinion, as they will be found in the Proceedings of the Society ; but it may be well to point out that the experience of almost all vaccinators seems favourable to early vaccination, and when no doubt exists as to the antecedents of the child, and the weather and other circumstances are suitable, vaccination before three months ought to be the rule. Vaccinators and general practitioners, therefore, ought to endeavour to influence public opinion in this direction by advising early vaccination in appropriate cases.

In connection with this subject, there is one matter to which attention may be drawn, and that is, the quality of the calf-lymph supplied by the Central Board of Health. One of the chief reasons urged by Dr. Plummer for an alteration of age, was that a number of children escape vaccination altogether, owing to parents leaving a district before their children are six months old. It appears that a large number escape *efficient* vaccination, owing to the fact that the calf-lymph supplied to vaccinators does not take. People insist on calf-lymph being used. If it does not take, the vaccination is repeated, and if still ineffective, the parents then claim, and obtain, a certificate of insusceptibility, in accordance with Section 11 of the Act. It is alleged that in a majority of cases this is what occurs. Whether the failure is due

to the quality of lymph supplied, or to the mode in which it is used, is a little uncertain. Vaccinators say the fault is in the lymph. The fact remains all the same, that apparently a large number of children escape vaccination in this way.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee held on the 23rd ult., Dr. T. J. M. Kennedy was elected to act as a resident medical officer in place of Dr. E. L. Gault, who was recently appointed resident surgeon of the Alfred Hospital.

Dr. Molloy has been appointed to succeed Dr. Lewellin as medical superintendent.

ALFRED HOSPITAL.

At the meeting of the Committee held on the 19th ult., Dr. A. V. M. Anderson, resident surgeon, applied for and obtained the position of resident physician, vacant by the resignation of Dr. C. H. Molloy.

The Hon. Secretary of the Medical Students' Society wrote to suggest that, for the completion of the clinical school of the hospital, it would be advisable that some scheme should be adopted whereby the appointment of resident officers should be restricted to graduates of the Melbourne University. It was also suggested that the plan adopted at the Melbourne Hospital, where the term of office of the residents was restricted to one year, and the appointments made according to positions on the final honour list at the University, should be adopted at the Alfred Hospital. The Managers decided not to bind themselves to adopt the suggestions at present.

There were two candidates for the vacant office of resident surgeon. A ballot was taken, and Dr. E. L. Gault, of the Melbourne Hospital, was declared elected.

The office of dispenser to the Hospital having again become vacant, Mr. H. A. Jeeves was appointed temporarily for three months on probation.

The annual meeting of subscribers to the Alfred Hospital was held on the 26th ult. Among other matters, the Chairman in his

report stated that only ten students (seven ladies and three gentlemen) entered the institution for medical practice during the current year. This diminished number was due in great measure to the want of conveniences for students at the Hospital, a difficulty which, from the absence of the necessary funds, the Managers had not yet been able to overcome. The University authorities had asked if instruction could be afforded students in such special branches as diseases of women, of children, and of the eye, ear, and throat, but the Managers had been obliged to reply that the present accommodation of the Hospital was inadequate for that purpose. The Managers had the pleasure to report that the various medical examining bodies in Great Britain had intimated their willingness to recognise the students' certificates of the Alfred Hospital school. The system of having paying wards was growing in public favour, 249 patients having availed themselves of them during the past year, which number was exactly 100 over those recorded for the previous year. In order to make the wards self-sustaining, the Managers decided that the charge for the two classes of paying patients should be £5 5s. and £3 a week, being an increase of one guinea and 10s. per week respectively.

Dr. Jamieson, in thanking the Committee on behalf of the hon. medical staff, pointed out that there was no opportunity during the summer of giving clinical instruction at the Hospital, owing to the prevalence of typhoid fever. He suggested that arrangements should be made for keeping a minimum number of beds open for complaints other than typhoid.

WOMEN'S HOSPITAL.

At the ordinary meeting of the Committee, held on the 26th ult., Dr. Clayton, the Resident Medical Officer, reported that the condition of the midwifery wards was very unsatisfactory. On account of over-pressure, the wards had not been properly aired and ventilated; and there had been a number of high temperatures, and several cases had been isolated.

Dr. T. L. Kennedy, having been appointed a Resident Medical Officer of the Melbourne Hospital, forwarded his resignation of his position as Assistant Medical Officer in the Women's Hospital. The resignation was received, and Dr. Lewers, of Sandhurst, was appointed to replace Dr. Kennedy temporarily.

The annual meeting of contributors was held on the 7th inst. The report states that, since its opening in September last, the new wing had been fully occupied, and its construction had proved good in itself and in its results. The infirmary wards had been altered and improved; but the accommodation in this department was found to be quite inadequate to the wants of the poor of the community, many needy patients having to wait for months before they could be admitted, owing to the insufficient number of beds. The work of clinical instruction had been extended, thirty medical students, and fifteen pupil nurses, having studied at the hospital during the year. Several members of the Medical Congress who visited Melbourne inspected the institution, and expressed their high approval of the sanitary and antiseptic arrangements. During the year, 2693 patients had been relieved, 1060 being in-patients, and 100 being boarded out at the expense of the hospital. Since the opening of the new wing, the system of boarding out patients had been discontinued. In some cases, where the circumstances of the patients rendered it advisable, they were attended at their own homes. The balance-sheet showed the receipts and expenditure for the year to be as follows:—Receipts, £6213 10s. 1d., and expenditure, £7223 17s. 11d., including a transfer to the endowment fund of £1006, leaving a debit balance of £1010 7s. 10d. The building fund showed a debit balance of £1799, and the endowment fund a credit balance of £5.

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and suburbs for June 1889, shows that the births of 1348 children, viz., 691 boys, and 657 girls, were registered. The deaths registered numbered 686, viz., 384 males, and 302 females. The births thus exceeded the deaths by 662. To every 1000 of the population the proportion of births registered was 3·08, and of deaths 1·57. One hundred and fourteen deaths, or 17 per cent. of the whole, took place in public institutions.

The number of children under one year who died was 160, the total number under five years of age being 251.

Deaths from whooping-cough, which rose from 12 in April to 14 in May, again rose to 19 in June; but deaths from typhoid

fever fell from 92 in May to 36 in June; and the deaths from diphtheria fell from 35 in May to 30 in June. The mortality from typhoid fever in the month under review was the lowest in any month since the beginning of the year, but the mortality from diphtheria was higher than in any month except May. The following is a statement of the deaths from these two complaints in each of the first six months of the present and two previous years:—

DEATHS FROM TYPHOID FEVER AND DIPHTHERIA, 1887 TO 1889.

MONTHS.	TYPHOID FEVER.			DIPHTHERIA.		
	1887	1888	1889	1887	1888	1889
January	40	39	70	1	5	15
February	70	63	64	4	2	13
March	59	54	91	3	13	18
April	57	43	113	6	13	26
May	40	32	92	10	19	35
June	15	20	36	7	16	30
Total	281	251	466	31	68	137

Local Subjects.

MEDICAL BOARD.—The following name has been added to the Medical Register:—James Kerr, Melbourne, M.B. et Ch. M. Edin. 1884. Additional qualification registered:—No. 1407, Harold Knowles Bean, Heidelberg, Ch. M. 1880, M.D. 1884, Edin.

HEALTH OFFICERS.—The following appointments have been confirmed:—Shire of Yarrawonga, Central Riding—Joseph Francis Bartley, M.B., *vice* James Amess, M.B., resigned. Shire of Numurkah, West Riding—Charles Drinkwater, M.R.C.S., *vice* John Johnstone, M.B., resigned. Shire of Dunmunkle, North Riding—Charles Broom, M.R.C.S., *vice* Andrew Grant, M.B., resigned. John Francis Molyneux, M.R.C.S. Eng., has been appointed Acting Health Officer for the Port of Melbourne, at Williamstown, during the absence on leave of H. R. Maclean, M.B.

PUBLIC VACCINATOR.—John Rae Menzies Thomson, M.B., has been appointed Public Vaccinator at Essendon.

Dr. Fetherston was, at a meeting of justices on the 22nd ult., re-elected chairman of the Prahran Bench for the ensuing year.

Leave of absence for two months was granted to Mr. T. M. Girdlestone, lecturer in surgery at the University, and Mr. J. H. Webb was appointed as his *locum tenens* for that period.

MEDICAL STUDENTS' SOCIETY.—A lecture under the auspices of the Medical Students' Society on reminiscences of the Franco-German War, was delivered by Dr. J. P. Ryan at the University on the 11th ult. There were about 150 students and their friends present, including a number of ladies. Professor Allen, the president of the society, occupied the chair, and briefly introduced the lecturer. Dr. Ryan, who happened to be in Paris at the outbreak of the war, after describing the confidence with which the French entered upon the conflict, narrated some of the most striking incidents in his experience with the French army of the Loire, and summarised the methods of treatment and results of the various forms of gunshot injury. A complimentary social to Dr. Lewellin, who is retiring from the position of medical superintendent of the Melbourne Hospital, was held at Parer's Café on the 13th ult. A presentation of a silver salver, bearing a suitable inscription, was made by Professor Allen on behalf of the medical students of the University, and a handsome clock was presented by Dr. Gault from the resident medical officers of the Hospital. Dr. Lewellin was warmly complimented upon his management of the institution, and the very favourable results which were obtained from the inadequate room at his disposal.

The Edinburgh University Graduates' Association of Victoria has lately been formed in Melbourne, with the object of bringing together, in a social way, old Edinburgh University men. Its membership is not confined to any one faculty, all graduates or members of the general council of the University of Edinburgh being eligible for election to the association. The office-bearers are—President, Andrew Harper, M.A., B.D.; vice-president, W. H. Cutts, M.D.; members of committee, D. Grant, M.A., M.D., Professor Orme Masson, D.Sc., Rev. J. T. Robertson, M.A., Charles Ryan, M.B., and John Williams, M.D.; with Dr. Rothwell Adam, M.B., as honorary secretary and treasurer. The first annual dinner was held at Scott's Hotel, on the evening of the 5th of August, at which about twenty gentlemen sat down. The president was in the chair, with Professor R. Wallace, of Edinburgh University, on his right hand. Among those present were, Professors Laurie and Masson, Drs. Le Fevre, M.L.C., and Shields.

The Central Board of Health was informed recently by Dr. George Palmer, of the Ararat Hospital, that a Chinaman suffering from leprosy had been received into the institution. It was suggested that the man should be removed to the leprosy camp at the quarantine station, but the Board has since learnt from Dr. Palmer that the patient had succumbed to the disease.

At the meeting of the Central Board, held on the 19th ult., the President brought under notice a suggestion by Dr. Plummer, of Port Melbourne, an experienced vaccinator, that in the new Health Act the time allowed for the vaccination of infants should be reduced to three months after birth instead of six months, as at present. A child, if healthy, could be vaccinated within a week of birth with safety, and there was less inflammation, as a child at that age lay quiet. Dr. Shields said the objection to the course suggested was that vaccination was not usually done in the summer, as a child was not so well qualified to stand it during the hot weather. The suggestion was referred to Dr. Shields and Dr. Tweeddale for report.

The second progress report of the Sanitary Commission, which deals exclusively with the water supply of the metropolis, has been presented to His Excellency the Acting Governor. The Commission has recommended

that the alienated land within the catchment area of the Yan Yean should be resumed by the Government, and that, pending that being done, the dairies and farms on such land should be frequently inspected, so as to see that they are kept in a sanitary condition. It also suggested that the right of commonage within the immediate watershed of the reservoir, now granted to the Whittlesea Shire Council, should be revoked, and that the approaches to the reservoir should be guarded by the erection of an effective fence. The construction of an additional reservoir, at Preston, at the earliest possible date, is also recommended, as well as the speedy completion of the laying of the new main from Preston to South Melbourne, and the branch mains. The results of analyses made by Professor Masson of the water, as delivered in Melbourne, are given in the report, and they show that the water is fairly pure, though not so clean as is desirable, and is unusually free from living micro-organisms.

BIRTHS.

DUTTON.—On the 20th June, at Belleville, Lilydale, the wife of Dr. W. H. Dutton, of a son.

ICK.—On the 17th June, at Dundas-place, Albert-park, the wife of Rev. T. E. Ick, M.B., of a son.

JOHNSON.—On the 18th ult., at Ferrars-place, Albert-park, the wife of F. Miller Johnson, M.D., of a daughter.

LETHBRIDGE.—At the Mount, Alexandra, the wife of Dr. C. F. Lethbridge, of a son.

M'KENNA.—On the 22nd ult., at Nixon-street, Shepparton, the wife of Dr. M'Kenna, of a daughter.

PUCKLE.—On the 8th June, at Streatham, Edinburgh, Scotland (the residence of her father), the wife of Selwyn Hale Puckle, Esq., M.B., C.M., of a son.

STANTON.—On the 1st inst., at Kew, the wife of Dr. Stanton, of a son.

WALSH.—On the 14th ult., at Wilton, Cotham-road, Kew, the wife of William Butler Walsh, M.D., of a daughter.

WEIGALL.—On the 12th ult., at Glen Huntly-road, Elsternwick, the wife of Dr. R. E. Weigall, of a daughter.

DEATHS.

MACIVER.—On the 7th inst., at his residence, View-street, Sandhurst, Francis Alphonsus Maciver, M.D., aged 41 years.

MACLEAN.—On the 16th ult., at Cecil-street, Williamstown, David Duncan, child of Dr. H. R. Maclean, aged 1 year and 8 months.

WOOLDRIDGE.—On the 6th June, at 24 Trinity-square, London, S.E., suddenly, aged 31, Leonard Charles Wooldridge, M.D. Lond., D.Sc., M.R.C.P., assistant physician to Guy's Hospital, son of the late Leonard Wooldridge, M.B., of Overton, Hants; son-in-law of Sir Edward Sieveking; and nephew of Dr. Henry Wooldridge, South Yarra, Victoria.

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Original Articles.

A CASE OF THOMSEN'S DISEASE.

By T. F. FLEETWOOD, M.B. Dub., F.R.C.S.I.

On February 1, 1889, I was called to see H. C., æt. 26, a building surveyor, suffering from typhoid fever. The case was a severe one, lasting for three weeks; then there was a relapse of a week's duration; and finally, profuse hæmorrhage from the bowels, which left him in a precarious state for some days, after which he slowly recovered, and was able to be up and walk about a little from March 20.

At times, the nervous symptoms were very severe, but were controlled by maltine and opium—the former (in milk) having a marked effect on them. During this attack I learnt he had been afflicted for many years with an extraordinary affection of the muscular system, and on his recovery, I obtained the following particulars:—He has suffered from a peculiar rigidity of the muscles when first put in action after a period of rest, certainly from the time he was twelve years of age, but cannot say how long previously; when jumping, he had to get the stiffness out of his legs beforehand; in bicycle riding, he often got a fall in getting up or starting for a race (the excitement made him worse), when he lifted his leg to put his foot on the step, it became rigid; in shaking hands, he cannot let go the hand when he wants to. The stiffness also affects his jaws and tongue, so that sometimes he cannot speak for a few seconds; going upstairs is worse than coming down; he once fell in front of a train in crossing the line, but got the use of his legs before it reached him. The rigidity varies in severity from time to time; but after the first movement, it does not come on again till after a period of rest. In my presence, he shut his hand, and then had difficulty in opening it; but with exertion, gradually got it open, the stiffness was then gone, and he could do anything with it. He also took time in rising from his seat. The disease is in no way altered by the fever;

he is now, and always has been, a strong, healthy, muscular young man.

One of his sisters has the same affection, to a slight extent ; but it is not hereditary, so far as I could ascertain.

He has been under the care of several medical men, but treatment had no effect on the disease.

From the above, I diagnosed the affection as a case of Thomsen's disease. This opinion is borne out by the description of Thomsen's disease, given by Gowers, in his work on the "Diseases of the Nervous System," where he says :—"The disease is characterized by a peculiar rigidity of the muscles, which comes on when they are first put in action, after a period of rest. The rigidity is transient, and when it has passed off, it does not return as long as exertion is continued. The characteristic symptom is, tonic spasm of the muscles, when they are put in action after a period of rest. The rigidity is always increased by attention, and by nervous apprehension of it. No treatment appears to exert any influence on the disease. The only influence that has appeared to Thomsen to ameliorate the condition, is a life of active muscular exertion." This latter statement, my patient thoroughly endorses.

Buzzard describes two cases in the *Lancet*, May 1887, "the first, so far as he is aware, that have been observed in Great Britain."

MUSCÆ VOLITANTES.

By JAMES W. BARRETT, M.D., M.S., F.R.C.S. Eng.

Assistant Surgeon to the Victorian Eye and Ear Hospital, Melbourne.

Spots or strings in front of the eye, which elude vision when looked for, are a frequent source of trouble. They are often ascribed to the liver, and are regarded by many laymen as being a positive indication for the use of purgative remedies. The literature on the subject available in Melbourne is not very extensive, and it has seemed worth while to bestow some thought on the causation and significance of what is very often a most troublesome and annoying symptom.

Taking the evidence of the sufferers, which, in a matter of this sort, is not wholly to be disregarded, one circumstance immediately attracts attention—patients almost invariably state that

the spots or strings vary in number and in the nature of their distribution from day to day, according to the condition of the general health ; being most prominent, and most numerous, when the state of the system is low ; least numerous, and least prominent, when health and spirits are good. A number of sufferers state that the muscæ wholly disappear at times, but only to reappear, periods of years sometimes elapsing. Yet inquiry of the more intelligent patients, and men who, from the nature of their occupation, have received more or less scientific training, and are more likely to be accurate in their statements, discloses the fact that—at all events, in some cases—once seen, the muscæ never totally disappear. They may be unnoticed for a time, but can always be seen by directing attention to them, as by looking at a white cloud, and slightly moving the eye from side to side. Thus there is some *a priori* evidence of the subjective nature, not necessarily of their origin, but of the method by which they are brought into consciousness.

The forms generally seen are transparent rings, minute gray or even black dots, fine threads, and not infrequently, black dots with a fine, thread-like tail. They vary in sizes, according as the vision is adapted for far or for near objects, seeming smaller in the latter case. They never seem to actually cross the line of vision, or to interfere with central vision.

What factors may be recognised in their production ? They owe their existence undoubtedly to the existence in the vitreous of cells, groups of cells, filaments, and combinations of cells and filaments, which, however, can be very rarely seen with the ophthalmoscope. Jonathan Hutchinson states (*Ophthalmic Review*, January 1889) that:—"Although I have seen innumerable cases in which muscæ were attributable to this cause (sexual excess), I must confess that I have not seen many in which vitreous opacities could be demonstrated by the ophthalmoscope. A few, however, I have seen, and quite enough to make me believe in the relation between cause and effect." He then records a case which, to the writer's mind, is singularly inconclusive, since the fundus was never seen, the vitreous being gray and cloudy ; consequently, retinitis could not be excluded. However, Mr. Hutchinson's experience, that these opacities are usually too small to be seen, is generally confirmed. Shortly, the position is this—diseases of the fundus frequently produce opacities of the vitreous, which can be easily seen. Constitutional conditions

sometimes produce opacities of the vitreous which can be seen, but in which no fundus change is visible (but may exist nevertheless). But are there instances in which the fine opacities produce the symptom known as muscæ increase, independent of fundus change, and ultimately damage the vision? To this question, I think a negative answer will generally be returned.

As far as my own experience has gone, vitreous disease attended with opacity, sufficient to cause blindness or serious impairment of vision, is not usually preceded by muscæ.

The following case, is instructive:—A. B., aged 30, received an injury to the right eye six years ago, the eye being struck with a piece of brass, and the vision totally lost. There had been apparently no perforation. The sight of the left eye has been failing for about six months. The right eye diverges; there is no P.L., the vitreous is fluid and opaque, the fundus invisible; pupil dilates well. Left eye vision = $\frac{6}{18}$; pupil dilates well, fundus indistinct; vitreous cloudy and fluid, and contains numerous large black opacities. This patient had, when looking up at the sky, occasionally seen something move, but had never distinctly seen any spots or streaks.

Another case which illustrates a source of fallacy may here be related:—A. B. aged 38, a tall powerfully-built man, but with sallow and worn appearance, was for many years in the habit of smoking and chewing to excess. Had some venereal affection eleven years ago; doctors differed as to whether it was syphilis or not. Vision, right eye = $\frac{5}{5}$; left eye = $\frac{1}{18}$. Right eye normal; in left eye, choroidal changes in the yellow spot region, where there are visible a few indefinite and opaque spots; vitreous, not fluid, and contains no visible opacities. The vision in the left eye began to fail eighteen months ago, but for five and a half years previously, had been constantly troubled with muscæ in this eye. Had this patient lost his vision from vitreous disease, it would have been said that the muscæ were the first indication of the change; yet they were apparently quite independent of the real cause of visual failure, and may fairly be referred to toxic nerve irritability.

The changes which cause the appearance of muscæ, seem to be present in nearly all eyes, though to a varying extent, and it is almost impossible to find anyone who, when placed under favourable conditions, cannot be made to see them. We must therefore regard the fine opacities which produce the symptom very largely as physiological products, which do not interfere with vision, and

which are distinct from those more numerous and differently constituted vitreous opacities, which owe their origin usually to fundus change, and just possibly sometimes to general conditions, independent of fundus change. The microscopic character of the cells, which constitute the opacities, have been described and figured by Vocman (*Journal of Anatomy and Physiology*, October 1884).

The first factor then in the production of muscæ, as a symptom, is the presence in the vitreous of physiological products, in the shape of fine opacities, which vary in number, in size, and in distribution in different eyes.

We next come to the inquiry—why are they seen by some people, and not by others? It might be replied, that their variable distribution explained the matter; but it must be remembered, that even the variable distribution of the opacities is, in itself, to some extent an assumption, since these bodies are usually too fine to be seen with the ophthalmoscope. Further, the symptom varies in different individuals at different times, consequently, the matter wants further explanation. As the opacities must be always present in the vitreous, and as the shadows thrown by them on the retina must always be existent, though to different degrees, according to the illumination, it follows that, in some conditions, the shadows rise into consciousness, and at other times they do not. What, then, are the conditions determining this point? When it is remembered, that every day vision is obtained by the almost exclusive use of the central portion of the retina, and that images formed on the peripheral parts are almost unnoticed, it is not to be wondered that opacities in the vitreous, situated out of the visual axis, may remain unnoticed for a great length of time. And so we find it. The opacities causing muscæ fail to attract notice apparently for long periods, then are suddenly noticed, and become very troublesome and difficult to disregard.

In the initial production of muscæ, two factors are noticeable:—

(1) Some hyperæsthesia of the retinæ; (2) Errors of refraction.

It is well known that they become troublesome in nervous people, and in the subjects of nervous exhaustion, whether produced by excessive mental work, sexual excess, or other causes—in fact, in persons who may be fitly described as exhibiting action without power; persons whose brain and special senses are in a condition of irritability. Again, they are frequently noticed in the varied conditions denominated biliousness, and may be due to retinal hyperæsthesia, the result either of reflex vascular change, or of poisoning.

The initial production of *muscæ* is also facilitated by the existence of errors of refraction, especially myopia. It seems that, in myopic eyes, the changes in the vitreous are more marked than in other eyes; but quite apart from this fact, the blurring and indefiniteness of images, the result of myopia, tends to the production of *muscæ*. The improvement of the vision effected by glasses is, at times, an efficient method of enabling the individual to disregard the *muscæ*. The sharply defined images obtained by the use of glasses, by contrast, throw the vague shadows produced by the vitreous opacities out of consciousness. Another factor plays a part in causing a continuance of *muscæ* once noticed—the retinal and cerebral education for the shadows. Once the peripheral part of the retina, and the associated portion of the brain, is affected by the stimulus, there is certainty of the occurrence of increasing facility of perception every time they are noticed.

Surveying the whole matter, it seems that *muscæ* must be regarded in the main as subjective phenomena, with an objective basis of origin. Their significance is simply that, for some reason or other, portions of the retina and corresponding parts of the nervous system have become sensitive to shadows which are usually disregarded. Consequently, from a clinical point of view, the matter resolves itself into a careful examination and estimation of the refraction of the eyes of the sufferer, and a search for indications of local or general nerve irritability. Whilst *muscæ* very rarely, if ever, are the forerunners of vitreous disease, sufficient to cause blindness, yet their existence, if hitherto unnoticed, indicates the necessity for a thorough examination of the eyes, and of the general condition.

At the inquest, held on the 2nd inst., on the body of Dr. Drinkwater, of Nathalia, who was found dead in his bed, the evidence of Dr. Keys, of Nathalia, and of Dr. Johnston, of Williamstown, showed that the deceased's heart was very weak, and might cease to act under a heavy strain. A bottle containing chloroform was found by the bedside of the deceased, and both the witnesses gave, as their opinion, that there were not the slightest grounds for suspecting suicide, but that death was caused by paralysis of the heart, consequent upon the inhalation of chloroform. The coroner returned a verdict that the deceased had died from paralysis of the heart, caused by the inhalation of chloroform, which was taken to alleviate pain caused by neuralgia and catarrh.

ECHINOCOCCI OF THE LIVER—THORACIC INCISIONS, ACCORDING TO LINDEMANN'S METHOD—CURES.—CONT.

By J. DAVIES THOMAS, M.D.—Continued.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
9.	London. Adelaide Hospital, 1888.	M.	15	Echinococcus cysts in liver, one in left, and the other in right lobe.	Thoracic section in both: stitching, &c. Immediate and complete removal of mother-cyst.	Abcess in upper lobe of right lung, probably due to an old hydatid.	Cure.
10.	W. Gardner. Adelaide Hospital, 1888.	F.	22	Upper surface of the liver.	Abdominal section: cyst opened and stitched. Mother-cyst not completely removed: fistula left for some time. Six weeks later, thoracic incisions both in front and back of base of chest, 80 cm. pus and cysts: ribs resected in both places.	This patient nearly died from an aspiratory puncture performed some weeks previously.	Cured in about five months.
11.	Verco, 1888.	F.	21	Convexity of liver.	Incision over fifth interspace, and excision of piece of fifth rib, about 1½ inches outside right nipple line. Counter opening, eighth interspace posteriorly: immediate removal of mother-cyst.	Tapped six years ago. Cyst then believed to be a pulmonary cyst. Calcareous degeneration in places in the sac-wall: several pieces escaped, the largest about the size of a shilling.	Recovering. 17/10/88.
12.	Verco, 1882.	M.	33	Convexity of right lobe of liver.	Incision in an intercostal space. Immediate removal of mother-cyst.	Pleural cavity not observed to be opened at time of operation, but afterwards pus collected in the pleura as a loculated empyema; this was incised and drained.	Cured completely.

ECHINOCOCCI OF THE LIVER—THORACIC INCISIONS, ACCORDING TO LINDEMANN'S METHOD—DEATHS.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Götze, Thierfelder. Cited by Madelung. Op. cit., No. 130, p. 125. 1882.	F.	28	Echinococcus cyst of convexity of liver.	Aspiration in the eleventh inter-space; 450 ozs. clear hydatid fluid. The canula was left in, its lumen being blocked; iodiform dressing; a fortnight later, excision of a piece of the eighth rib in the anterior axillary line; parietal and diaphragmatic pleure adherent, so incision carried down to the echinococcus sac, which was opened and stitched to the parietal wound.	The patient was progressing favourably as regards the hydatid disease, when she died of hemorrhage caused by an ulcer of the stomach. Post-mortem.—Four other small hydatids in the liver; the lining-membrane of the sac operated on was granulating.	Death not due to echinococcus disease.
2.	Verco. Adelaide Hospital, 1888.	M.	51	Upper surface of right lobe.	Exploratory puncture yielded pus; incision in seventh space, axillary line; no rib removed; adhesions present; no stitching required.	Apparently had pneumonia at time of operation; patient very prostrate.	Death next day.
3.	J. Davies Thomas. Adelaide Hospital, 1888.	M.	24	Large cyst on convex surface of liver, compressing the right lung, but not causing much displacement of the heart.	Exploratory puncture in fifth interspace axillary line, gave evidence of a degenerated cyst. Incision; excision of piece of fifth rib, axillary line; stitching; immediate removal of mother-cyst. Drainage-tubes inserted into sac, and pleural cavity.	Patient very exhausted and emaciated before operation; much ascites present; mother-cyst weighed 9 ozs. and was estimated to have an area of 64 square inches. Fluid greenish and opaque; no daughter-cysts.	Death from septicaemia on twenty-fifth day.
4.	Lendon. Adelaide Hospital, 1888.	F.	31	Hydatid cyst on upper surface of liver operated on.	Exploratory puncture yielded clear fluid. Excision of piece of sixth rib. Stitching of sac. Immediate removal of mother-cyst.	Three years previously, patient had been tapped for a hydatid cyst, and at the autopsy there was found a second cyst in the liver, which is described as suppurated. The patient caught cold, and developed right pleurisy, with effusion. Post-mortem.—Commencing pericarditis; cavity of hydatid in right lobe of liver, containing a little pus; a second suppurating cavity in the liver; abscess in rectorical pouch; intestines glued together.	Death from peritonitis six days after operation.
5.	Görger. Adelaide Hospital, August, 1887.	M.	27	Upper surface of right lobe of liver. Ascites.	Tapped; abdominal incision gave exit to ascitic fluid; wound plugged to procure adhesions; wound healed. Second incision, with excision of portion of sixth rib, and incision of diaphragm; wound plugged with iodoform gauze; wound dilated, and drainage-tube inserted. Escape of hydatid membranes; incision near right iliac crest; puriform fluid and shreds of membrane.		Death, septicaemia.

HYDATIDS OF LIVER, WHICH HAD RUPTURED INTO THE PLEURA—TREATED BY THORACENTESIS.—CURES.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Israel. Cited in Virchow and Hirsch's Jahresbericht für 1878. Vol. II., p. 416.	M.	83	Hydatid of the liver, which had ruptured into the right pleura	The exudation was partly removed by punctures repeated eight times; it then became purulent. Six months after the rupture, incision of the pleura.	Pleuritic effusion, serous at first; some days after the incision, escape of the mother-cyst, by the wound.	Cure gradual.
2.	Güterbock. Zeitschrift für Chirurgie, Vol. XX. Cited in Virchow and Hirsch, Jahresbericht, 1884. Vol. II., p. 415.	M.	18	Echinococcus of convexity of liver, which ruptured into the right pleura, and into the large intestine. For thirteen weeks symptoms of right-sided empyema.	Operation for empyema, with sub-peritoneal excision of a piece of the sixth rib. Escape of fetid pus, daughter-cysts and mother-cyst, and also of faeculent-smelling and bile-stained masses from the wound. A second rib-resection made to give drainage.	Diagnosis of empyema; escape of cysts by the stools; expectoration of faeculent yellowish sputum.	Cure.

DEATHS.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Ruyseh. Cited by Davaine. Traité des Entozoaires. Obs. 275, p. 620.	F.	(?)	Hydatid cyst of liver, regarded as thoracic effusion.	Incision between the last false ribs, on the right side; introduction of tent.	Escape of hydatids. No precautions.	Death promptly.
2.	Lancet, 1864. Vol. II., p. 632. Norwich Hospital.	M.	25	Rupture of liver hydatid into the left pleural cavity; empyema.	Incision; pus and hydatids in great quantity.	Expectoration of pus and cysts.	Death by exhaustion.
3.	J. Davies Thomas. Case seen in consultation with Hayward. Feb. 1888.	M.	6	Hydatid of convexity of liver, which had ruptured into the right pleura.	Incision, with resection of a piece of rib, at lower part of right chest. Bile-stained fluid, which soon became fetid; exploration of pleura, direct incision into the hydatid sac, below the costal margin. Patient moribund at time of operation. Incision in sixth interspace.	The orifice of rupture in the diaphragm was too distant to be felt through the parietal wound.	Death in three or four days after second operation.
4.	Lendon and Davies Thomas. Adelaide Hosp. Sept. 1887.	F.	22	Post-mortem — Large hydatid on upper surface of liver, adherent to the diaphragm; base of right lung also adherent to diaphragm; rupture of the parasite into the lung.	Post-mortem — Large hydatid on upper surface of liver, adherent to the diaphragm; base of right lung also adherent to diaphragm; rupture of the parasite into the lung.	The patient was operated on merely as a last chance.	Death.
5.	Melchert. Cited by Maderlung. Op. cit. No. 142, p. 129.	M.	44	Right pleuritic effusion, apparently from rupture of all liver hydatid.	Exploratory puncture; clear yellowish fluid; eight days later, second puncture; no fluid. Pneumonic symptoms. Incision into cedematous swelling, about seventh and eighth ribs, in right axillary region. Pus and cysts; escape of bile.	Towards end, phthisical symptoms. No post-mortem examination; pleura traversed.	Death in about a month.
6.	Escher. Zur Statistik der Echinococcus. Inaug. Diss. Berlin, 1868. Case 31, p. 24.	F.	34	No details.	Incision in sixth intercostal space opened into a large cavity in the right lobe of the liver; escape of numerous hydatids.	Post-mortem.—Circumscribed abscess in Douglas' pouch; five small hydatids in left broad ligament. Pleura traversed.	Death.

CASES OF PULMONARY HYDATID TREATED BY RADICAL OPERATION.—DEATHS.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Mr. Charles Williams. Lancet, 1864. Vol. II., p. 682.	M.	25	Left pleural cavity, also two collapsed hydatids in the liver.	What appeared to be an abscess on the left side of the chest was freely incised. A wash-hand-basinful of pus and hydatid cysts escaped.	Air escaped freely through the opening, and the patient spat up pus and hydatid cysts.	Death from exhaustion.
2.	Bird, Dr. D., Aust. Med. Jour., 1871.	F.	—	An enormous hydatid in the left lung.	Puncture with trochar, followed by incision in the fourth interspace. Cyst and pus escaped.	Great improvement, but the wound contracted, so as to hinder discharge. Cough returned. The patient refused further operation.	Death.
3.	Bird, Aust. Med. Jour., 1881, p. 171.	F.	26	At lower part of right pleura apparently.	Puncture with trochar, in seventh intercostal space: three pints of semi-purulent fluid, containing hooklets, were removed, but very little relief resulted. Ten days later, incision in the seventh interspace. Decompressing ruptured hydatid removed with great relief.	About a fortnight after the incision, dyspnoea and oppression of the chest came on, and during the exploration of the cavity with a gum-elastic catheter, a second hydatid was ruptured, and about ten ounces of clear hydatid fluid escaped. Relief again resulted, but symptoms of cardiac trouble came on, and the patient died.	Death.
4.	H. B. Allen. Aust. Med. Jour., 1881, p. 108. Treated in the Melbourne Hospital, by Mr. Fitzgerald.	M.	41	In lower lobe of right lung a large hydatid cyst, containing fecid pus, and broken membranes, the remainder of the lung solid and airless.	Trochar inserted, and drainage-tube introduced. Afterwards wound enlarged, to give free exit to discharge.	In this case, the hydatid membranes were not completely evacuated by the operation.	Died a few days after the operation.
5.	J. Davies Thomas. (Unpublished case).	M.	45	Practically, the entire right lung replaced by a huge hydatid. Fully four-fifths of the total lung had disappeared.	Puncture with trochar, for exploration, followed by incision in the fifth space, about one inch outside nipple line. Counter opening in ninth space, line of posterior axillary fold; large drainage-tube passed through.	Mother-cyst, entirely removed at time of operation. Patient died twenty-second day after operation, of septicaemia. Left pneumonia, pleurisy, and pericarditis were found.	Death.

PULMONARY HYDATIDS TREATED BY RADICAL OPERATION—CURES.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	Fréreau (1812). Jour. Gén. de Sédillot, tom XLIII. Cited by Cruveilhier, Davaine, Hearn, &c.	M.	28	Puffy swelling at the posterior and inferior part of the right chest, with maximum protrusion at the eleventh intercostal space. Fluctuation present, and on pressure the fluid could be caused to enter the chest; by coughing, the soft tumour was reproduced.	Incision over the swelling—a hydatid cyst presented in the wound—this being opened, limpid fluid escaped, and afterwards a large quantity of yellow pus. Subsequently, escape of pus and hydatids from the wound.	Fifteen days after the operation, copious expectoration of pus and hydatids. Many hydatids escaped afterwards, both by the wound and by expectoration.	Great improvement. Probably ultimate cure.
2.	Landau. Archiv. für Gynæk. VIII., Heft. 2. Cited by Neisser, p. 115, No. 16.	F.	25	Tumour size of fist situated underneath the right breast, and attached to it, extended obliquely from fourth rib to margin of thorax.	Incision carried down to tumour; gave exit to 400 grammes of clear amber-yellow fluid, with 30 to 40 hydatid cysts; afterwards free discharge of cysts, pus, and shreds of connective tissue.	The hydatid had eroded the ribs, and destroyed the intercostal muscles where it projected. Cough continued after the operation.	Recovery after profuse empyrion, escape of cysts, &c., for some months.
3.	Southey. Barth. Hosp. Rep. 1867, Vol. III., p. 394.	F.	31	Very large hydatid in the right lung Marked bulging on right side of spine, posteriorly, caused displacement of lower angle of right scapula.	After four months palliative treatment, tapped; 132 ozs. of puriform serous fluid removed. Trochar left in, but escaped after a couple of days, was replaced by a tracheotomy tube; in about a fortnight, decomposition of the contents of the cavity set in with pyrexia, &c. Then free incision in sixth interspace, on lateral aspect of chest. Cyst size of pig's bladder removed.	Some difficulty in ensuring sufficient drainage after the incision; no drainage-tube employed. Dr. Southey regarded the cyst as pleural. It certainly lay above the diaphragm.	Recovery complete three months after the operation.

PULMONARY HYDATIDS TREATED BY RADICAL OPERATION—CURES.—CONTINUED.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
4.	MacGillivray. Aust. Med. Jour., March 1867, p. 70.	F.	27	Large hydatid in right lung.	Large trochar inserted below angle of scapula, upwards of two puncta of pus withdrawn. Chest twice subsequently opened, and ultimately a large catheter kept in. Cysts escaped in considerable numbers. Cavity washed out with a double catheter. Warm water used, and afterwards a weak sulphate of zinc injection.	Diagnosed as pleurisy, with effusion. In the discharge from the sinus, "the microscope showed a quantity of yellow elastic fibres, and disintegrated lung tissue, showing that the cysts had been situated within the lung."	Recovery. Small sinus left at last report.
5.	Montard-Martin. Gaz. Hebdom. 1871. Cited by Hearn. No. 127.	M.	17	Right side of chest; evidently large cyst, very noticeable bulging of right chest. Probably a pleural cyst.	Fine trochar used, no fluid removed, afterwards Dieulafoy's aspirator tried, but only 20 grammes of pus procured. Incision gave exit to much pus and numerous hydatids, afterwards injections of alcoholised water were used.	Diagnosis of empyema; pyrexia; night sweats; yellowish tint in face.	At time of last report making good progress towards recovery.
6.	Blair. Aust. Med. Jour., 1875, p. 144.	F.	About 35	Lower part of right lung, principally in front.	Threeappings in two months. The last occasion, a trochar of the diameter of No. 7 catheter tied in 112 ozs. of pus and daughter-cysts escaped; fifteen days later, incision in the eighth intercostal space.	Rapid improvement after the removal of the mother-cyst through the incision.	Recovery complete about ten weeks after incision.
7.	Dr. D. Bird. Aust. Med. Jour., 1876, p. 304.	M.	38	Side not mentioned. Cyst of very large size, 144 ozs of fluid were removed at first tapping. [Right lung].*	Tapped, and parent cyst removed entire, by dilatation and incision. Cyst extracted entire or nearly so.	The post-mortem examination showed that the hydatid was radically cured, only a small fistula remained.	Died of erysipelas and abscess of lung.
8.	Do. do. Dr. Barrett's patient.	F.	22	Lung locality not mentioned. [Left lung].*	"Parent cyst extracted" entire, or nearly so.	In hospital 72 days.	Cured.

* The exact locality of these cysts is mentioned in Dr. Bird's book on "Hydatids of the Lung," Second Edition.

PULMONARY HYDATIDS TREATED BY RADICAL OPERATION—CURES.—CONTINUED.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
9.	Do. do. Dr. Barrett's patient.	F.	33	Lung locality not mentioned. [Right side].*	"Parent cyst extracted" entire, or nearly so.	In hospital 61 days.	Cured.
10.	Dr. Bird. Loco. Cit. Dr. Bird's case.	F.	21	Lung locality not mentioned. [Right lung].*	Tapped and incised. Cyst came away piecemeal.	In hospital 97 days.	Cured.
11.	Dr. Bird. Loco. Cit. Dr. Barrett's case.	F.	11	Lung locality not mentioned. [Left lung].*	Tapped and incised. Cyst came away piecemeal.	In hospital 63 days.	Cured.
12.	Do. do. Dr. Bird's case.	F.	22	[Right lung].*	Tapped and incised. Cyst came away piecemeal.	Cyst of enormous size. "The patient was so near death from syncope and pressure, that she had to be carried on her bed in a furniture van, straight from her home to the hospital." In hospital 44 days.	Cured.
13.	Do. do. Dr. Bird's case.	M.	12	[Right lung].*	Tapped and incised. Cyst came away piecemeal.	In hospital 69 days.	Cured.
14.	Dr. D. Bird. Aust. Med. Jour., 1881, p. 178.	F.	9	Side of chest not mentioned.	Large trocar inserted in fifth intercostal space. Two days later, incision and removal of cyst.	Had bed-sores in consequence of being unable to breathe, except in one posture.	Recovery complete within a month.
15.	Dr. D. Bird. Aust. Med. Jour., April 15, 1884.	M.	Adult	Lower part of the right lung in front.	Large trocar inserted in fifth intercostal space. Afterwards incision and antiseptic injections for three weeks.	The patient had clubbed finger-ends, which gradually disappeared during the treatment.	Cured; one month.
16.	Fenger and Hollister. The American Journal of the Medical Sciences, Oct. 1881, p. 871.	M.	34	Middle of right lung.	Incision in third interspace in front. Counter-opening in fifth interspace. Injection of sea, and immediate removal of cyst.	Physical signs in the chest considerably modified by changes of posture.	Cured; 102 days.

* The exact locality of these cysts is mentioned in Dr. Bird's book on "Hydatids of the Lung," Second Edition.

PULMONARY HYDATIDS TREATED BY RADICAL OPERATION—CONTINUED.

NO.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
17.	F. W. Baily. Proceedings of S. A. Branch of the British Med. Assoc., July 29, 1881.	M.	15	Posterior base of right lung.	Incision between ninth and tenth ribs, posteriorly; also, at same time between seventh and eighth ribs, and counter-opening in front, between fifth and sixth ribs, just outside the nipple. Drainage-tube passed through chest.	The nails became clubbed during the treatment.	Cured.
18.	F. W. Baily. See case 17.	F.	10	Posterior base of right lung.	Incision in the fifth interspace, just outside the nipple. Counter-opening at back.	—	Progressing favourably at time of report.
19.	J. Davies Thomas. (Unpublished).	M.	30	Base of right lung.	Incision in eighth interspace, right scapular line, followed by forcible dilatation by forceps. Immediate removal of mother-cyst, drainage-tube inserted.	Case of cyst ruptured into bronchial tube. Cough ceased after the removal of the parasite.	Recovery rapid and complete.
20.	Do. do.	M.	14	Upper lobe of right lung.	Incision in the fifth right interspace, mid-axillary line. Forcible dilatation of lung wound, with forceps. Immediate removal of mother-cyst. Drainage-tube inserted.	Cyst had previously ruptured into bronchial tract. Cough ceased after the removal of the parasite.	Recovery rapid (under two months).
21.	Do. do.	F.	35	Upper lobe of left lung.	Punctured some months before admission. Incision in fourth left space, about mid-axillary line. Immediate removal of cyst.	Cyst punctured and rupture into bronchus before admission; strong suspicions of phthisis in right lung. Rapid improvement after removal of cyst.	Fair recovery. Sinus closed, &c., but still slight cough and occasional hæmoptysis. General health good.
22.	Dr. Verco. Unpublished.	F.	13	Lower part of left lung, chiefly in front.	Exploratory puncture. Incision in eighth interspace, axillary region. Pus and debris of hydatids discharged.	This patient was seen by me (J.D.T.) in August, 1884; she then appeared to be in good health.	Cured.

PULMONARY HYDATIDS TREATED BY RADICAL OPERATION—CURES.—CONTINUED.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
23.	H. T. Groom, Esq. Lancet, 1884, Vol. I., p. 846.	F.	15	Large hydatid in right lung.	Three weeks before admission, three points of fluid removed by aspiration. Incision 1½ inches long in the sixth interspace, axillary region; much fluid and many daughter cysts discharged.	Diagnosis of empyema.	Recovery, but eight months afterwards, still a fistula discharging pus.
24.	Dr. Isalah de Zouche. Aust. Med. Jour., 1883, p. 9.	F.	13½	Patient wasted and anemic. At the first glance looked like a case of phthisis. Dulness over lower part of right lung, front and back, "the line of dulness in front was altered by change of position." Sputa copious, frothy, and semi-purulent, with disagreeable smell as they came up.	Exploratory puncture with hypodermic needle in seventh interspace, between the axillary lines, drew off stinking pus. Incision in seventh intercostal space. Pus, followed by a hydatid cyst as large as a coconut, escaped. Operation under antiseptic precautions; injection of iodine and permanganate of potash tried, but given up in consequence of their causing severe cough; drainage-tube kept in.	Diagnosis of empyema. Great dyspnoea during operation "purulent and bloody sputa coughed up in great quantity." "She was grasping for breath, and seemed in imminent danger of death."	Cure. Drainage-tube removed on fifty-second day; left the Hospital on sixty-sixth day, but fit to leave three weeks earlier.
25.	Bouilly. Gaz. Med. de Paris, 1886.	M.	46	Lung.	Excision of piece of third and fourth ribs in front; adhesions were found to be present. The cyst was opened by the thermo-cautery.	In spite of the use of the thermo-cautery, there was considerable hæmorrhage, which was arrested by tampons.	Cured.
26.	Breitkopf. "Ueber die operative Behandlung einer Lungenhämorrhagie." Inaug. Dissert. Grieswald, 1882.	M.	25	Right axillary region and posterior base.	Incision under antiseptic precautions; excision of about 2 inches of the sixth rib; an exploratory puncture however, brought away quite frothy blood.	The cavity could not be reached, so the wound was closed.	Complete recovery followed.
27.	Way. Adelaide Hospital, 1886.	M.	13	Base of right lung (ruptured).	Incision through an interspace; broken down cyst escaped.	Cavity washed out with weak Condy's fluid.	Cure, four and a half months.

PULMONARY HYDATIDS TREATED BY RADICAL OPERATION—CURES.—CONTINUED.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
28.	Way. Adelaide Hospital, 1886.	M.	18	Unruptured cyst of apex of left lung.	Incision.	The mother-cyst escaped from the wound unruptured.	Cured.
29.	J. Davies Thomas, 1884 and 1887. Private practice.	F.	12	Upper lobe of left lung. When first seen by me, rupture into a bronchus had taken place, and there was pleuritic effusion also present on the left side.	Thoracotomy gave exit to pleuritic fluid, but no membranes, &c.; Signs of pneumo-thorax followed the operation, but cleared away in about a month; two and a half years later the hydatid cavity at the apex was freely opened by a superficial incision; the use of a trochar and dilating forceps and the decomposed cyst contents escaped.	After the thoracotomy operation the patient improved greatly in health for two and a half years, but cough and purulent expectoration continued. Rapid convalescence after the opening and drainage of the pulmonary cyst.	Cured.
30.	J. Davies Thomas, 1887. Private practice.	M.	33	Unruptured hydatid, situated at posterior base of left lung.	Incision in line of posterior axillary fold; excision of a piece of the eighth rib; when the pleura was exposed, an exploratory trochar was introduced; clear fluid removed; then incision of sac and wound dilated with forceps.	Parasite of about the size of a coconut removed at once, en masse.	Cured completely in six weeks.
31.	J. Davies Thomas, 1888. Adelaide Hospital.	M.	20	Hydatid at base of left lung treated by puncture at the Melbourne Hospital.	Incision and excision of about 2 in. of the ninth rib in the left scapula line, lung adherent; sac freely opened; immediate removal of the sac.	Contents of sac foetid.	Cured in one month.
32.	J. Davies Thomas, 1888. Private practice.	F.	26	Hydatid of upper lobe of left lung, which had ruptured into a bronchus for over four years.	Large trochar passed into a cavity at the apex of the lung from the upper part of the axilla.	Thirty-six hours before the operation patient nearly suffocated by a copious expectoration of hydatid membranes and pus, and it is difficult to estimate what share the operation had in the cure.	Rapid recovery.

PULMONARY HYDATIDS, WHICH HAD RUPTURED INTO THE PLEURAL CAVITY, TREATED BY THORACENTESIS.

No.	REFERENCE.	SEX.	AGE.	LOCALITY OF CYST, &c.	OPERATION.	REMARKS.	RESULT.
1.	J. Davies Thomas, Adelaide Hospital, 1888.	M.	21	In lower part of right chest, in front, probably pleural, but dullness was continuous with that of the liver below.	Puncture in fourth interspace, just inside the right nipple line, was followed by signs of pneumo-thorax and fluid at the base. Incision in tenth interspace, posteriorly: subsequent escape of mother-cyst; drainage-tube inserted and kept in.	Patient in very critical condition before escape of cyst; rapid improvement afterwards; cyst not ruptured before puncture.	Recovery complete.
2.	J. Davies Thomas. Aus. Med. Gazette, May 1888.	M.	6	Small hydatid of right lung which had ruptured into the pleura and had caused pneumo-thorax.	Incision in eighth interspace in right scapular line; a small quantity of spontaneous coagulable fluid escaped. No factor of the gas or fluid in the pleura.	Five weeks after operation the cyst escaped through the pleural opening.	Cure complete under two months.
3	J. Davies Thomas. Aus. Med. Gazette, June 1888.	M.	19	Large hydatid of right lung, which had ruptured into the pleura: localised, basic, pleuritic effusion.	Incision in eighth interspace, posterior axillary line; a considerable amount of spontaneously coagulable pleuritic fluid escaped; this had been enclosed above by adhesions; afterwards signs of pneumo-thorax at the upper part of the chest; incision in third interspace, and counter-opening in sixth interspace, just above the line of adhesions.	The signs of pneumo-thorax came on after the operation on the pleuritic effusion, and the mother-cyst escaped after the second operation.	Cure complete in two months.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, SEPTEMBER 4TH, 1889.

(Hall of the Society, 8 p.m.)

The President (Dr. BALLS-HEADLEY) occupied the chair, and there was a good attendance.

The minutes of the preceding meeting were read and confirmed.

The PRESIDENT then made a statement to the meeting, of the steps that had been taken with regard to the new Medical Bill that was to be brought before Parliament. Copies of the Bill had been sent to all members of Parliament. Several influential members had been seen, and other were to be spoken to, and then they would endeavour to obtain from Mr. Gillies a definite statement, as to whether the Government would take the matter up or not. If not, it might then be desirable to have the Bill introduced in the Legislative Council.

The following gentlemen were then elected members of the Society:—As an honorary member—David Purdie McLean, L.R.C.S. Ed., L.S.A., of Williamstown. As ordinary members—William Mayne Clayton, L.R.C.S.I., L.K.Q.C.P.I. et L.M., of Women's Hospital; Alfred James William Keenan, L. et L.M.R.C.P et L.R.C.S. Ed., M.D., Ch. D. (Brux.), of Wellington Street, St. Kilda; John Rae Menzies Thomson, M.B. Melb., of Essendon.

Three gentlemen were nominated for membership.

The following paper was then read:—

CÆSAREAN SECTION, WITH OÖPHORECTOMY— RECOVERY OF MOTHER AND CHILD.

By M. U. O'SULLIVAN, L. et L. M.R.C.P. et S. Edin.

Hon. Physician, Midwifery Department, Women's Hospital.

Now that the question of the relative merits of Craniotomy and Cæsarean Section is being so warmly discussed, and excites so much attention, the case which I have the honour of bringing before you this evening cannot fail to be of interest, and I shall be glad if I have succeeded in evoking discussion upon a subject, the settlement of which still, to some extent, awaits authoritative decision:—

E. D., aged 17, single, was admitted to the Genevieve Ward wing of the Women's Hospital on the night of May 27th, in

labour, at full time. I was summoned to the hospital early next morning, and found the girl with marked rachitic deformity of pelvis;—the conjugate not measuring more than two inches; the liquor amnii had been away for some time; the os was dilated to the size of half-a-crown; discovered a foetal heart, and active movements; short, and of course ineffectual, pains recurred at frequent intervals.

On consultation with Dr. Meyer, who was the only member of the honorary staff immediately accessible, we agreed that delivery *per vias naturales* could not take place, and decided that Cæsarean Section afforded the best prospect of life, both to mother and child, a decision subsequently endorsed by Drs. Hooper and Adam.

On the same afternoon, at 3 o'clock, Dr. Praagst administering the anæsthetic (chloroform, kept up with ether), assisted by my colleagues, I proceeded to operate according to the improved method suggested by Garrigues, in an article to the *International Medical Journal*, May 1888, all the preparations being precisely as for ovariectomy, and with all the usual antiseptic precautions. I divided the abdominal wall in the median line, from about an inch and a half above the symphysis, to a point about one and a half inches above the umbilicus, and turned the uterus out of the abdominal cavity. Before making the uterine incision, I had the cervix and broad ligaments constricted by an elastic band (Esmarch's), under the control of Dr. Adam. I made a free uterine incision, confined to its upper two-thirds, so as to avoid the large blood-vessels and connective tissue spaces that abound in the lower third segment. I may here state, that so effectual was the use of the constricting band, that bleeding, our most formidable antagonist in this operation, was entirely controlled, the patient not having lost a drachm of blood. The foetus was extracted, and was found asphyxiated, because of the temporary arrest of its blood supply, through constriction of cervix with the elastic tube, but it was quickly resuscitated. Here is a point that demands our most careful attention;—the danger to the child, of prolonged or continuous constriction of cervix. After having obtained firm contraction, ergotine having been previously given hypodermically, the placenta, which was adherent to fundus at back, was removed without difficulty or complication. For the uterine wound, I used a continuous suture of antiseptic catgut, taking the precaution to fold as much as possible of the peritoneal covering in between the edges. Here again was experienced another great

advantage from the constriction of the cervix during the operation—in the exactitude with which the sutures can be passed. Now, I may be allowed to express my strong conviction, that the continuous suture is the most effectual means of bringing the edges together, and keeping them in accurate apposition during uterine contraction. Thus does it help to promote rapid union, to prevent bleeding, to guard against septicæmia, peritonitis, incarceration of intestine, and the escape of lochial discharge into the peritoneal cavity.

With the object of sterilizing the patient, her ovaries and tubes were now removed in the usual way; the rubber band was here loosened, but left in place for a reasonable time, lest the dreaded hæmorrhage should supervene. There was slight oozing, which stopped on the simple pressure of a hot sponge, when the uterus was returned to the abdominal cavity, and the omentum pressed up above it. The opening in the abdominal wall was closed with deep silver sutures and superficial horsehair. The wound was dusted with iodoform, and covered with salicylated cotton, fastened with broad straps of adhesive plaster to the sides of the abdomen, and the usual binder applied, as in ovariectomy.

During the course of the operation, it was not found necessary to introduce a sponge into the peritoneal cavity.

The patient was now replaced in bed, and re-action was quickly established, by the aid of artificial heat, and the injection of warm beef tea and brandy. Nothing could have been more satisfactory than the progress of the patient after the operation. There was no vomiting. Nourishment, in the shape of peptonised beef tea, egg and brandy, was given by the rectum from the beginning. The enemata were alternated with meat suppositories (Burroughs, Wellcome and Co.), opiates were dispensed with, unless when called for by great pain, when morphine bimec. was given hypodermically.

After the first two days, she began to take nourishment by the mouth, commencing with raw meat juice and pepsine, in small quantities, frequently repeated. During the first three days, the urine was drawn off by the nurse, to avoid straining. The most annoying symptom which had to be combatted during the after-treatment, was flatulent distension, of an extreme degree, which set in on the second day; but this source of trouble was soon dispelled by the use of the rectal tube, and the exhibition of five-drop doses of tinct. nucis vom. every two hours, the painful tension

on the stitches being at the same time relieved by drawing the knees upwards, and supporting them over pillows.

The highest temperature reached was 102.5° , on the fourteenth day, and this was attributable, in a great measure, to a small superficial abscess, which had occurred in the track of one of the abdominal sutures. Whenever the body heat reached 101° , it was quickly subdued, by small doses of antifebrin by mouth, quinine or antipyrin per rectum, and the application of a rubber ice cap.

The sutures were removed on the ninth day, union of the peritoneal surfaces having taken place by the first intention. The bowels were opened regularly from the third day, having been assisted chiefly by warm water enemata.

After twenty-first day, the temperature remained normal, and the patient left her bed quite well on June 28th, one month from date of operation. She now wears a close-fitting abdominal belt, to guard against the danger of hernia, at the site of abdominal wound. The baby, a weakly one, was placed at the breast, for the first time, at the end of the third week, and has since thrived remarkably.

The points of the operation to which I desire chiefly to draw attention are:—(1) The turning of the uterus out of the abdomen, a procedure involving only about a two inch longer incision in the abdominal wall. (2) The constriction of the cervix with an elastic band. (3) The use of continuous suture of antiseptic catgut for uterine wound. (4) Keeping lower end of uterine incision in upper uterine segment.

When we consider the great success that has attended Cæsarean Section of late years, as performed in well equipped hospitals, by the method suggested by Säger, and first practised by Leopold, we must at once admit the undoubted legitimacy of the operation. Garrigues, writing in 1888, said that Cæsarean Section, surrounded as it now is by all the safeguards of modern surgery, has reached such a degree of perfection, that he believed it to be safer to the mother than difficult extraction through the natural passages. The same author—same year—quotes eleven cases of Cæsarean Section, six of which, performed in hospital, saved five mothers and five children; five, in private, saved one mother and three children. It is the universal experience, but more particularly in Germany and the United States, that almost all the unfavourable cases occurred in private practice.

The question naturally arises, why this great mortality should obtain in private, as compared with hospital, practice. I think it may be safely concluded, that the cause of the failure is due to the defective use of antiseptics in private; and to this may be added the delay in coming to a decision; and the consequently unfavourable condition of the uterus, due to exhaustion, by protracted and fruitless labour, and the injury to soft parts from prolonged compression.

There is little or no evidence to prove that the toilette of the peritoneal cavity, on which all ovariologists lay so much stress, has, in the past, been particularly attended to in Cæsarean Section. And it cannot be denied, that the performance of this operation—more particularly according to the old method—afforded the best possible opportunity for septic infection.

Crédé stated, not very long ago, that craniotomy on the living child should be superseded by the Conservative Cæsarean Section; and in his most recent paper on this subject we find, from statistics, that the maternal death-rate in the latter operation has been gradually, but surely, decreasing, until in the latest cases operated on in Dresden and Leipzig by himself, Sänger and Leopold, the maternal mortality is reduced to 5 per cent.; and Wyder, of Berlin, whose material was drawn from an experience of 15,000 cases of labour, said recently, in his comparison of both operations, that when performed in hospitals and other suitable places, under favourable conditions, craniotomy must inevitably yield to the Cæsarean Section of Sänger. While admitting that the mother's life should have unquestioned and paramount supremacy, it would certainly appear that, with the advancement of the obstetric art, and the more perfect midwifery practice of the future, we are justified in assuming that craniotomy on the living child will become entirely unknown, and that Cæsarean Section will be treated, as it should be, an operation of election, not the *dernier ressort* of the lying-in room. It is now generally conceded that, if the improved operation, as practised by Leopold, Garrigues and others, is performed before the vital powers are weakened, and the uterine tissues injured by protracted parturition; if it is done with the means at our disposal for controlling hæmorrhage, with the continuous uterine suture, with thorough cleansing of the abdominal cavity, with scrupulous cleanliness and care in every stage, it is as safe to the mother as craniotomy; and that, considering the great probability of saving the child, it

ought to have a prior place to the only operation sanctioned by surgery, which is undertaken with the avowed object of destroying life.

The following paper was then read:—

A CASE OF CÆSAREAN SECTION.

By FELIX MEYER, M.B., B.S.

Hon. Physician, Midwifery Department, Women's Hospital, Melbourne.

M. M., æt. 18, single, was admitted to the Midwifery Department of the Women's Hospital, about 10 o'clock, on the night of the 17th July last. She had been in more or less pain (of labour) for a day and a half; and for sixteen hours in strong labour, before she had been seen by a medical man who, after unsuccessfully attempting delivery by long forceps and version, had called in my colleague, Dr. O'Sullivan, who at once recommended her admission to the Women's Hospital.

On admission, she was an undersized, unhealthy-looking girl, in a low condition, with a thin small pulse of 140, and a dry brownish tongue. Examination, per vaginam, showed an abnormally narrow pelvis, with prominent sacrum and pubes. The os could be felt very high up, and anteriorly; it was dilated to a little more than the size of a florin, and the head could be felt through it, impacted and immovable. The foetal heart was distinctly heard. Dr. O'Sullivan had kindly come with the patient, and examined her with me a second time carefully.

Drs. Hooper and Adam having been summoned, and having examined, the staff were unanimously of the opinion, that the only advisable method of delivery was by abdominal section.

The operation was commenced at 1.30 a.m. The patient was anaesthetised by Dr. Kennedy, one of the resident medical officers, who began with chloroform, and continued with ether. I was ably assisted by the members of the honorary staff, and the Resident Medical Officer, Dr. Clayton. The uterus being steadied in the mid-line, and the abdominal wall kept tense over it, I cut down and exposed the organ, which was then carefully squeezed by Dr. O'Sullivan through the abdominal section. Dr. Adam now applied an Esmarch's band round the cervix, at the lower margin of the wound, and I made a free longitudinal incision into the uterus, and exposed the back of the child. A considerable amount of traction was necessary for its delivery, the large head being firmly impacted; but there was little or no delay, and up till now, the

operation had proceeded fairly rapidly. The child was a full grown live female, weighing $9\frac{1}{2}$ lbs. Dr. O'Sullivan now took charge of the uterus, while Dr. Hooper assisted me in the removal of the ovaries and tubes. The placenta was found to be adherent over two-thirds of the fundus, and the secundines had to be traced down along the cervix, and carefully peeled off. During this process, considerable hæmorrhage occurred, and at the conclusion of the third stage, the uterus showed no inclination to contract. Gentle pressure was kept up, and warm flannels were applied to protect the exposed organ, but it did not become as firmly contracted as I could have wished. It was cleansed of all clots, and a sponge passed along the cervical canal to the vagina. The edges of the uterine wound were brought together by continuous carbolised catgut suture, through the whole thickness of the uterine wall; and to prevent its relaxing, I brought the suture back again along the entire length of the wound. The uterus was returned to the abdomen, and the abdominal opening closed with silver and horse-hair sutures.

At the close of the operation, the temperature was normal and the pulse 136, and during the day they rose to 102.6° and 164 respectively, with respirations 24.

Vomiting, abdominal pain, and tympanites were the accompanying symptoms of acute peritonitis, to which the patient succumbed sixty hours after operation, the pulse never being below 148, and the temperature reaching its maximum of 103.8° twenty-four hours after operation.

With the exception of a small clot, the size of a hen's egg, passed by vagina on the third day, there was no hæmorrhage. The treatment, carried out by the nurse who so excellently nursed Dr. O'Sullivan's case, consisted in nutrient enemata, morphia injections, antipyrin, small quantities of stimulants, with the passage of O'Beirne's tube for the relief of flatus.

The post-mortem made by Mr. Syme showed extensive peritonitis, with no union either of the uterine or abdominal wounds.

The measurements of the pelvis, devoid of the soft parts, were estimated by Mr. Syme as follows:—

At the Brim.

Antero-posterior diameter	..	..	$2\frac{1}{8}$ inches
Transverse	..	..	4 "
Right oblique	..	..	$4\frac{1}{2}$ "
Left oblique	..	..	$4\frac{1}{2}$ "

At the Outlet.

Antero-posterior diameter	..	..	3 inches
Transverse	„	..	2½ „

My warm thanks are due to the whole of the honorary and resident medical staffs, who ably assisted me at a case, which I regarded on admission as very unpromising, weakened as she was by a long and exhaustive labour, supplemented by instrumental and manual attempts at delivery.

The following paper was then read:—

CASE OF PREGNANCY, WITH CARCINOMA OF
CERVIX, INVOLVING QUESTION OF CÆSAREAN
SECTION.

By J. W. DUNBAR HOOPER, L.R.C.S. et L.R.C.P. Ed.

Hon. Physician, Midwifery Department, Women's Hospital.

B. M., æt. 47, X para; admitted at the Women's Hospital, midwifery department, on 26th December, 1888. I first saw her on the morning of the 28th. She said she was eight and a half months pregnant, was not in labour, she complained of excessive hæmorrhage without pain.

Previous history.—Had natural pregnancies and labours with all her nine children. Painless bleeding commenced somewhat suddenly about five months ago, when she reckoned that she was over three months pregnant. Bleeding would cease for a week or ten days, then recur in gushes. No fœtor. Was laid up for this cause in the Geelong Hospital for some weeks, but did not get any better. Attended out-patient department, Women's Hospital, and told to come to obstetrical side.

Condition on first examination.—Patient fairly nourished, but cachectic; temperature normal; pulse 88; fundus within four inches of xiphi-sternum. According to her own calculations, she is fully thirty-four weeks pregnant. No œdema, and no albumen in urine. External palpation revealed living child in normal position; fœtal movement distinct. Fœtal heart not definitely heard at this time, owing to noises in the ward, but subsequently recognised until 4th January.

Per vaginam.—Carcinoma of entire cervix, which was thick. Os admitted the forefinger easily. Some bright odourless blood followed the examination, which pained her a little. First consultation held on 29th. I stated my opinion as to the facts

recorded above; advised immediate delivery either by natural passages, or by modified Cæsarean Section. The hon. staff fully agreed in the diagnosis, but all differed from me as to treatment—each advising that patient wait till natural labour set in, when they expected she would safely deliver herself. Patient continued in the same condition, temperature remaining normal, until the 2nd of January, when I called a second consultation. I now strongly urged immediate operation, the full details of the case having been explained to patient and her husband, who agreed to operation. I urged as my reasons for this step:—(1) Undoubted pregnancy of living child of eight and a half months (viable). (2) That the carcinoma involved entire cervix, and perhaps part of left vaginal wall. (3) Hence danger of fatal hæmorrhage during dilatation of os externum. (4) Sapræmia or septicæmia was likely to arise when discharge became fœtid, or by sloughing, caused by pressure of child through the union of diseased and healthy tissue. (5) That now was the most favourable time for operation, as there were neither pyrexia, fœtor, abdominal pain, nor quickened pulse, nor signs of labour. (6) Delay increased the chances of septicæmia of patient, and poisoning and death of child. (7) It were wiser to operate deliberately as to time and method, than hurriedly, whenever labour commenced. (8) My contentions were entirely supported by all the authorities.

But the other members of the staff still held to their first opinion as to the advisability of waiting until full time, only modifying it to the extent of performing laparotomy if then required. As the further development of the case showed, the woman was really dying when she did deliver herself, so that laparotomy was then out of the question. On this day, January 2nd, fœtid discharge appeared, with abdominal pain, rigors, and temperature 102°. On the 4th, another consultation was held, with similar results to the previous ones. By the 6th inst., there was intense fœtor and extensive peritonitis. She delivered herself at 1 a.m. on the 7th of a dead fœtus (skin peeling off), and died exhausted early next day. At the delivery, there was no hæmorrhage, and child was expelled naturally. At the third stage there was some trouble, and I washed out the uterus with perchloride of mercury solution.

Post-mortem, by Mr. Syme, Hon. Pathologist to the Hospital, showed "carcinoma of cervix only, and slight infiltration of posterior vaginal roof. There was extensive recent peritonitis with adhesions,

considered about three weeks old. Cervix was not torn; uterus contained a quantity of black pieces of membrane. Death due to peritonitis, which was not septic." I should very much like to know the cause of that peritonitis, which I certainly regarded as due to blood-poisoning, and which was ushered in by the rigor of the January 2nd, and by intense fœtor of the discharges. What else could cause the peritonitis, but absorption from glands infiltrated with germs?

I will briefly give the opinions of acknowledged authorities on the treatment of similar cases:—

Barnes says the best time for operation is to select approximately some day in the last period of gestation. Again on page 352, he writes, "Malignant disease of lower uterine segment, preventing due dilatation, involves danger of laceration, and hence hæmorrhage." In ordinary cases, requiring Cæsarean Section, such as malacosteon, he advocates delay till the advent of natural labour. On page 350, "in cancer of cervix, the parts may be so unyielding, as to render Cæsarean Section less hazardous than opening a canal through contracted aperture." Barnes certainly in any case is very cautious in advising Cæsarean Section; consequently, his emphatic opinion in this direction is the more valuable.

Herman, "Obst. Trans.," Vol. XX., says, that when pregnancy occurs in a woman with carcinoma of cervix uteri, there is a tendency to intra-uterine death, and the growth of the disease is accelerated.

Schröder states that, in these cases, Cæsarean Section is too seldom resorted to. He says that the mother dies in labour, or in puerperium.

Sir Spencer Wells is an advocate for Porro's modification, when possible.

Lusk says:—"Cæsarean Section is indicated in advanced carcinoma of cervix, and during the pregnancy, we may have formidable hæmorrhage from the cancer, and," I note this particularly, "if entire portio vaginalis of cervix is involved in cancer, the pressure on the parts during labour causes necrosis of tissue, and is followed by fatal septicæmia; but in advent of labour, Cæsarean Section holds out hope of saving one life, and does not increase perils to the other;" and he adds that "Fordyce Barker's good fortune in having three women survive the puerperium, is rare."

Spiegelberg, page 402, last ed., says:—Cancer of cervix curtails life of patient by laceration during labour. He advises waiting as long as possible, and then Cæsarean Section. He points out the danger of waiting till labour, and then incising cancerous cervix, as we never know how far that incision may be prolonged by force of the child's passing through it; he says Cæsarean Section is worthy of consideration, and that every effort must be made to save the child; and further, no hesitation can be felt in regarding Cæsarean Section *as the only proceeding*. This particularly, where disease invades the inner os, and several instances are on record where both lives have been saved.

Playfair states, Vol. II., pages 2—8, that he does not contest the British rule, that Cæsarean Section is not an operation of election, but only to be performed when delivery p.v.n. is impossible; but he adds that mortality is considerably lessened, if time of operation is selected, and quotes statistics by Dr. Harris, of Philadelphia, that twenty out of twenty-seven cases of operation, where the time was selected, recovered. On the continent, it is well known that Cæsarean Section is thoroughly an operation of election; and Playfair distinctly thinks the operation is required in obstruction, from advanced malignant disease of cervix.

I certainly think that it was a mere piece of good luck, that labour in this case was completed without hæmorrhage. May be, the dead child caused less pressure than a living one would. Had operation been calmly and deliberately undertaken on or before the morning of January 1st, I believe (1) the child would have been saved, and (2) the mother's life prolonged over the puerperium. Waiting, brought septicæmia and peritonitis, and death of mother and child. Therefore, I earnestly hope that any other surgeon having a similar case, will operate, and that by election, and thus add to the successes of sound obstetrical work.

Mr. SYME spoke of the subject first from its surgical aspect. Dr. O'Sullivan used the continuous suture, presumably with inversion of the peritoneum. Now, in two cases operated on at the Women's Hospital, on which he had made autopsies, there was no union of the uterine wound, and the peritoneal edges showed a gap of at least an eighth of an inch. All authorities agree as to the propriety of inverting the peritoneum; but this does not appear to be a rational proceeding, as you thus bring

uninjured surfaces into contact. In ordinary wounds, you would never think of turning the outer surfaces of skin flaps towards each other, in order to get union. It would appear to be more rational to dissect up the peritoneum on either side, and evert it, so as to bring two broad freshened surfaces into contact. With regard to the union of muscle, it is not correct to say that surfaces of muscle do not unite. In many post-mortems made at the Women's Hospital, he always found the muscle united, the skin generally, but the peritoneum less often. He thought it would be wise to get a buried suture in the muscle, if possible, then a continuous suture through the muscle and peritoneum, and finally, another continuous suture for the everted peritoneum. Some authorities recommend incising the uterus, and then tearing, instead of cutting, it; others advised cutting with a scissors. Dr. Hooper had asked why the peritonitis in his case was said to be not septic. In the first place, it was not purulent; there was very little fluid, and there were tolerably firm adhesions; there was no pleurisy, and no pericarditis; there were no petechiæ, and no changes in the lungs. Also, it is well known that peritonitis does commonly occur with carcinoma of the cervix uteri, arising either directly from the carcinoma, or from glands secondarily involved. With regard to the pelvic measurements in Dr. Meyer's case, one point seemed to him peculiar, and that was the marked lateral contraction at the outlet. The girl was undersized, and the pelvis small in all directions; but what caused the great approximation of ischial tuberosities? There was no sign of rickets or osteo-malacea; it was apparently only a want of development. In this case, some portions of membrane were found lying against the uterine wound, and may have had something to do with the want of union.

Dr. WILLIAMS took exception to Mr. Syme's comparison of the skin and peritoneum, as peritoneal surfaces were wonderfully ready to adhere when inflamed.

Dr. ADAM spoke as a member of the Women's Hospital staff. He congratulated Dr. O'Sullivan on his exceedingly instructive case. The patient was a fairly strong healthy woman, no effort had been made to effect delivery, and the uterus contracted well after delivery. From Dr. Meyer's case, it is seen that the critical point is, as to what to do with the uterine wound. Formerly, it was left alone, as it was noticed that in accidental cases, as where the uterus was ruptured by a fall, or torn or cut, a large number

recovered. According to Sanger, after extracting the child, a layer of peritoneum on each side of the wound is dissected up, a piece of muscle excised on each side of the wound, to allow the inverted peritoneal surfaces to be brought together. Deep sutures are then passed through the muscle, and superficial interrupted sutures each passed twice through the peritoneum only, on both sides of the wound. In this way, the peritoneum is securely fixed.

Dr. ASTLES thought that Dr. O'Sullivan's case was a brilliant success; but he thought that Cæsarean Section was an operation that would be done only in hospitals. If the mortality was reduced to five per cent., so also was that of craniotomy.

Dr. BARRETT agreed with Mr. Syme, that union would be much more likely to occur, if raw sub-peritoneal surfaces were brought in contact, than if peritoneal ones were; but he did not think that Mr. Syme's analogy was a good one. From the anatomical nature of the skin, plastic exudation from the surface was almost an impossibility; whilst, for anatomical reasons also, it was of frequent occurrence in connection with peritoneal surfaces.

Mr. SYME explained that he did not mean to imply that the peritoneum was like the skin. He knew that peritoneal surfaces united only too readily. A few weeks ago, in making a post-mortem at the Women's Hospital, he found that the cause of death was intestinal obstruction from adhesions after laparotomy.

Dr. MOORE said that we should all be thankful to the staff of the Women's Hospital, for bringing these cases before the meeting. Since his student days, this subject had always been very interesting to him, because he had then seen two cases of craniotomy, and he never wished to see another. The second of these cases was analogous to Dr. Hooper's, and he was sure that if the same surgeon had such a case to treat again, he would extract the child by Cæsarean Section, and then remove the uterus itself. Whatever other means of effecting delivery be adopted—forceps, turning, or the induction of premature labour—it is quite certain, that there will be a number of cases in which our choice must lie between Cæsarean Section and craniotomy. He had recently read in a German journal a report of eight cases—six were done at Leipsic, in hospital, with five recoveries; two in St. Petersburg, both successful. At first, Cæsarean Section was only done on dead or dying women, with a view of saving the child. Then, when done with the object

of saving the mother as well as the child, the mortality had been terribly high—as much as eighty-five per cent. Porro's operation was the first great improvement. The advantages claimed for it were (1) no danger of after bleeding, (2) no danger of lochia escaping into the abdomen, (3) removal of a septic organ from the body, (4) prevention of subsequent pregnancy. Porro, in a short space of time, operated five times, with one death, but his success was not achieved by others. Also, Porro's operation was introduced at a time when abdominal surgery was making rapid strides, and when antiseptics were wonderfully improving results in all branches of surgery. Hence, other improvements were suggested, and these were combined by Säger in his method of operating, constituting what is termed "the Conservative Cæsarean Section." His order is not exactly that followed by Dr. O'Sullivan. The uterus is drawn out of the abdominal wound; the elastic ligature is then placed round the cervix, but is not tightened; then the incision in the uterus is made in the mid-line, beginning at the fundus; the placenta and membranes, as well as any clots of blood, are removed; the ligature is tightened then, and not until then, unless there have been very severe hæmorrhage, as from the incision hitting the placental attachment; the ligature is tightened to facilitate the application of the sutures, of which two layers are applied; the deep are inserted by passing the needle from within outwards, the decidua only being left out; then intermediate sutures are applied to the peritoneum only, and Lembert's suture is usually adopted for these. At first, in order that the peritoneum might be inverted for the whole length of the wound, Säger "undermined" the peritoneum, i.e., dissected up the peritoneum, and cut away portions of the muscular wall bordering on the uterine incision. The uterine cavity is then thoroughly cleaned and rubbed with iodoform, and the sutures are fastened. In one fatal case, a post-mortem showed that the muscle had united well, the weakest union being where the peritoneal surfaces were in contact. Säger subsequently gave up the "undermining," and this is now generally not done. A striking feature of the German cases was, the rapidity with which the operation was done—in one case in twenty-nine minutes. The St. Petersburg cases took over an hour, but in them buried sutures were used. Instead of removing the tubes, they might be tied in two places, and then divided. With reference to Dr. Hooper's case, in a somewhat similar case Sir Spencer Wells

extracted the child by Cæsarean Section, and then removed the whole uterus, and the mother made a good recovery.

Dr. BALLS-HEADLEY congratulated the gentlemen on their papers, and the Society on the manner in which the subject had been brought before it. It was fortunate that the cases should have occurred at the same time. The question of craniotomy *versus* Cæsarean Section was very important for the profession, and for the general community. The British rule is, that the life of the mother is the first consideration, but the same rule does not exist in other countries. Further, in some countries, the question is partly a religious one. With a conjugate diameter of $2\frac{1}{2}$ inches or under, Cæsarean Section should be the rule; but where the diameter is greater, craniotomy is easy; and in such cases in private, where labour has been long in progress, the membranes ruptured, and the head jammed down in the pelvis, craniotomy can be quickly done without risk, whilst Cæsarean Section would be attended with great danger. With reference to malignant disease of the cervix, he presumed that the case referred to by Dr. Moore was his case. There was undoubted malignant disease of the cervix, the os was dilated to about the size of half-a-crown. The woman had been a long time in labour. He thought that by nicking the edges, and then performing craniotomy, he could effect delivery. This he did, but the woman died. Never again in such a case would he do craniotomy—but Cæsarean Section rather. He assisted Dr. Greenhalgh, of London, in such a case; the woman recovered, and the epithelioma diminished for a time. When shall Cæsarean Section be done? If malignant, the rule is to wait as long as possible up to the time of labour; but it is necessary to have the cervix dilated, otherwise the discharges would tend to pass back, and so into the abdominal cavity. The conditions for recovery are much better than if the patient is in labour at the time. Modes of operating: There was no use in considering the early operations. One case he had seen where, after great violence had been used, the head had passed into the abdominal cavity, but recovery could certainly not be expected in such a case. In a village near Cologne, where the people were nearly all rickety, he had seen several cases upon whom Cæsarean Section had been performed four or six times. Recently Säger had perfected the operation. Porro's operation had been previously introduced. It was said that a Porro should only be done where the uterus was bruised, but he thought it should also be done

in cases where hæmorrhage persisted, or tended to persist, and in cases where the os was unmanageable, as in a very narrow pelvis, with the os high up, and out of reach. As to sutures: The silver embedded suture, as employed by Champneys, in a case recently reported, had not been mentioned. In this case, the tubes were tied, but not divided or removed. He (Dr. Balls-Headley) had recently received a letter from Professor Harris, of Philadelphia, in which he gave the following statistics of Porro's operation and Cæsarean Section:—

Porro's Operation.

YEAR.				NO. OF CASES.	DEATHS.	PERCENTAGE OF DEATHS.		
1884	..	..	..	28	..	18	..	64
1885-6-7	..	..	..	55	..	11	..	20
1888	..	..	..	8	..	1	..	12½
Seven operators had	..	..	..	51	..	9	less than	18
Multiple Porro's operations	..	..	..	83	..	29	..	35

Sänger's Operation.

—	..	..	..	150	..	42	..	28
German	..	..	..	80	..	12	..	15
1887	..	..	..	47	..	10	..	21½

Dr. O'SULLIVAN, in replying, expressed his pleasure at the discussion that had taken place, but there were a few points to which he would like to refer. If the edges be well adapted, union will generally take place; the elastic ligature was a great help in getting accurate adaptation. He thought tying the tubes, to ensure sterility, was very unscientific; Gusserow had shown that hæmatocele generally resulted. Of all the authorities he knew, Swayne, of Bristol, put the points best as to the choice between craniotomy and Cæsarean Section. According to him, where the conjugate is from three to four inches, if delivery cannot be accomplished by the forceps, then craniotomy should be performed. With a diameter between two and three inches, Cæsarean Section should be the operation of election; below two inches, also Cæsarean Section was the operation. There was a great run on Porro's operation at one time, and now it was the only operation of emergency, and as such, will always be performed. With regard to tearing the uterus, this is sometimes done in Porro's operation to prevent hæmorrhage. In malignant disease of the cervix, if the os be so rigid that labour is obstructed, then Cæsarean Section is a justifiable operation. Cæsarean Section is unjustifiable when the child is dead, unless the diseased tissue could be removed.

Dr. MEYER pointed out, in reply, that he had to deal with a woman who had been in labour for a day and a half ; for sixteen hours she had been attended by a medical man, who had used the forceps for half-an-hour ; all these facts were against success. He now thought that Porro's operation would have given a better chance. Possibly the long-continued use of the ligature had caused atony, and so favoured the hæmorrhage. As far as possible he had removed the membranes, and he and those present thought that they were removed completely. The gaping of the uterine wound, he thought, might have been due to intra-uterine hæmorrhage, but not to the presence of membranes. He thought that Dr. Hooper's case could not be regarded as a typical case of carcinoma of the cervix, on which discussion of the treatment of such cases in general could be based. When first seen she had a good pulse, a normal temperature, and was fairly strong. He saw no reason why she should not be delivered by the natural passages at full time. He had seen four such cases, three of whom were delivered naturally, and all recovered. Until the first examination, there were no symptoms ; it was a question whether the repeated and prolonged examinations might not have caused the rise of temperature, &c.

Dr. HOOPER, in reply, stated that it had been said that the child had been dead two weeks, and yet Dr. Meyer (who certainly was a good authority on such matters) had heard the foetal heart only a few days before the mother's death. He thought that the general opinion was, that Cæsarean Section was the correct treatment. He congratulated Dr. O'Sullivan on the splendid result of his case. It was important that in his (Dr. O'Sullivan's) case, the uterus was only exposed for a short time, whilst in Dr. Meyer's, it was for at least three-quarters of an hour.

Dr. MEYER read a note made by Dr. Fetherston, jun., soon after the delivery of Dr. Hooper's patient :—Child decomposed, dead at least two weeks. Its abdomen was greatly distended with gas, which caused some little trouble in delivery.

Mr. SYME, in explanation, said that some members appeared to be under the impression that he had said that the child had been dead a fortnight. He always declined to give an opinion in such cases, and had certainly not given one in this.

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MONTHLY MEETING.

Wednesday, August 28th, 1889.

(Hall of the Medical Society, 8 p.m.)

Dr. FISHBOURNE in the chair.

There was a fair attendance of members.

The minutes of the last meeting were read and confirmed.

Dr. NEILD took the chair while Dr. FISHBOURNE read his paper entitled, "Some of the Difficulties in the Treatment of the Well-to-do Insane."

Dr. NEILD made some remarks upon the unsatisfactory conditions under which well-to-do insane people laboured with regard to their proper treatment. He was glad that Dr. Fishbourne had brought forward the subject again.

The following paper was then read:—

NOTES ON SOME CASES OF SYPHILIS.

By FRED. D. BIRD, M.B., M.S., M.R.C.S. Eng.

In bringing forward some fragmentary cases of syphilis, I wish to show that the rarer forms, or rather the rarer conditions, do occur with sufficient frequency, to put us on our guard against them. Of course, it is to a certain extent a matter of opinion what are rare conditions. As a firm believer in the immediate administration of mercury in syphilis, I appreciate the enormous importance of being prepared to recognise the more unusual conditions of syphilis which occasionally obtain. Within the last three years, the following peculiarities are some of those which struck me as worthy of recognition:—

With regard to the initial lesion, the two most curious erratic chancres were—one on the nose, which had been treated for, and was very like, lupus; and another, a very large one, with much induration, on the dorsal aspect of an interphalangeal joint, which had all the appearance of a tuberculous ulcer, occurring as it did in a likely subject, and being unaccompanied in any part of its course by enlargement, either of the cubital gland, or of those in the axilla. I have always looked upon the multiple indolent enlargement of the nearest glands as one of our most important guides, but in this case the enlargement certainly did not exist, although the patient was afterwards covered with a profuse

popular and macular rash. In one other case, the enlargement was in my opinion absent, although the superficial gland in the left groin was harder than normal, the patient being sure that it was not bigger than usual. In this case, the point of contagion was scarcely at all indurated, but the dorsal lymphatics of the penis were painlessly enlarged in a moniliform manner. Modified secondaries proved the correctness of my diagnosis. Thus it would seem that when the nearest glands fail to enlarge, there is a likelihood of the initial lesion presenting unusual characters. Again, an indefinite chancre in a man on the pubes proved to be non-infecting, although soft sores, as a very general rule, occur only on the genitals. This case bothered me very much. The sore was single, the discharge was slight, there was some induration, no pain, and it took a long time to heal. The period of incubation was longer than usual with non-infecting sores, yet no constitutional symptoms followed. There is something more, regulating the amount of induration seen in an infecting sore, than the nature of the tissue in which it is implanted; probably, when we remember the hyperplastic tendency of syphilis, it is the amount of the virus which is absorbed that regulates the paucity or abundance of hardening at the point of inoculation. The continuance of induration of the sore, I have noticed for a period of nine months under treatment. The length of the stage of incubation is a most important diagnostic aid, and will, when a month, be almost pathognomonic of syphilis. It seems to me to be rather more than a month as a rule.

The question, whether bad auto-inoculating sores are generally followed by constitutional symptoms, as Hutchinson avers they are, is difficult to answer. I have seen both conditions frequently, but I think the chances are decidedly against a crop of bad soft sores being followed by a general infection.

As to secondary symptoms, I hold that they nearly always appear in some recognisable form, no matter how soon mercury is administered. If this were not so, it would be almost better to go back to the old-fashioned method of waiting for the appearance of secondaries before giving mercury in doubtful cases. In a number of cases, in which specific treatment was used from the first, one at least of these three manifestations could always be found:—(1) An ordinary modified rash on the body or thighs; (2) the presence of one or two papules on the dorsum of the tongue; (3) a few papules on the hairy scalp, not ulcerating or tubercu-

lating, but with a scurfy summit, and feeling like duckshot beneath the finger. These last I have come to look upon as pathognomonic of syphilis. The occasional marked persistence and recurrence of secondary rashes under treatment is very remarkable. An ulcerating secondary eruption may be very puzzling. One occurred to me in a robust and otherwise healthy individual, who had a history of soft chancres, but none of a hard sore. These cases are apparently common at home in the poorest classes, but not here.

As the tertiary stage progresses, the lesions become more and more local, and therefore, the necessity of treating them locally becomes greater. Thus, in serpiginous ulceration of the skin or mucous membranes, general constitutional treatment is, of course, a great factor in the cure, but not nearly so important, in my opinion, as the local application of mercurials. This is exemplified in the comparative ease with which we can heal an ulceration which we can actually touch, *e.g.*, in the hard palate or on the leg, and the long trouble we have with a syphilitic *ozæna* which we can get at locally only by means of injections and vapours. While lauding local treatment in these lupoid lesions, I prefer, to the cure of the actual sore, continuing constitutional treatment for some time after. Thus, while the administration of mercury and iodide is necessary for the prevention of further manifestations, local treatment is the essential for the cure of the existing sore. It is well to remember, that tertiary ulceration of leg may implicate the bone by continuity of surface, and will look like a sequestrum, whereas the bone is affected to a very superficial extent only; this was well shown in a case where an operation for the removal of a large sequestrum from the tibia had been planned, and the whole thing was eventually healed up by iodide and cinnabar vapours, with an exfoliation the size of a sixpence. On the other hand, the non-ulcerating gummatous affections, as a rule, appear to be very easily influenced by constitutional treatment, especially the iodide. I have seen local patches of *anæsthesia*, due to gummatous formations on the trunk of a nerve, disappear with great rapidity under the influence of the iodide. These areas of insensibility may be confused with similar patches caused by partial exposure to cold.

Mr. SYME was of opinion that the amount of induration of the initial sore, depended on the amount of poison inoculated, and the conditions the sore was exposed to, especially irritation from

contact with urine. Sores on the lips gave rise to great induration and deformity. Sores on the fingers were often very slight, though not invariably so. He pointed out that many soft sores became indurated, and were followed by constitutional syphilis, the blood-poison being probably inoculated at the same time. His experience was that, however soon anti-syphilitic treatment was commenced, secondary rashes or affections of mucous membranes developed. He pointed out the almost constant appearance of slight superficial proliferation and ulceration of the cheek and gum opposite the second molar tooth. In his experience, initial lesions, occurring away from the genitals, were followed by considerable glandular enlargement. He referred to the occurrence of tertiary ulceration at the site of the initial lesion. One case he had seen under Mr. Treves, of ulceration of the penis, where the diagnosis had been made, that the ulcer was secondary to some parasite—a "mycosis," the patient working among hides—but the ulceration improved, and was cured under anti-syphilitic remedies. He was of opinion, that it was of great importance in old tertiary ulceration, not only to treat the ulcers locally, but to treat the patient with anti-syphilitic remedies as well.

Mr. KENNY referred to a case of Hunterian chancre on the under surface of the tongue. There was marked induration, and the appearance resembled that of epithelioma. There was great glandular enlargement. A secondary rash developed. He had seen good results from mercurial inunction, in cases of tertiary ulceration.

The following paper was then read:—

NOTES OF A CASE OF CARBOLIC ACID POISONING.

By J. R. MENZIES THOMSON, M.B.

On the morning of the 12th ult., I was called by Dr. Fishbourne to assist him in a case of carbolic acid poisoning. The patient, who was a young servant girl, had been found by her mistress at half-past seven o'clock in bed, in an unconscious state, and slightly convulsed. Attempts were made to rouse her, but without success, and a message was sent for Dr. Fishbourne, who was told the girl was in a fit. He could not reach the house till about ten o'clock, when he found the patient in a state of collapse—cold, blue, with a clammy sweat, the pulse being very rapid, and almost imperceptible. He also found that, since he had been sent for, she had vomited, the ejected matter smelling strongly of carbolic acid, as

he verified by examination. He immediately injected ether subcutaneously, with the effect of rapidly restoring the circulation. A tumbler was found near the bedside containing a small quantity of water, with what was apparently carbolic acid floating on its surface, and coating the sides of the glass; and it was discovered that a bottle of crude carbolic acid, which was kept in the house for domestic disinfecting purposes, had been disturbed; but, on examination of this latter, it was thought that only a small quantity of the contents, probably not more than a tablespoonful, had been removed. The girl's teeth were firmly clenched, and she could not be made to swallow; her lips and gums were blistered.

When I arrived at eleven o'clock, she had recovered from the collapse, but was still unconscious. She had occasional convulsions of a somewhat tonic nature, but there were also slight clonic attacks, altogether much resembling the convulsions of hysteria, though not so violent. There was no foaming at the mouth, nor biting of the tongue; there was strong opisthotonus with the convulsions, and the head remained firmly arched back, so firmly that it could not be moved; this was continuous. She resisted any attempt to look at the pupils. The pulse was now firm, about 90; body warm, but hands and feet cold. I should mention, that she was conscious to this extent, that she sometimes moaned, and pressed her abdomen as if in pain. We used the stomach pump with some difficulty, on account of the vomiting which came on directly we attempted it, washed out her stomach, and injected a quantity of oil. The reason for using the pump was, that we had no other means of emptying the stomach of the, to us, unknown quantity of carbolic acid, or of administering oil to lessen the chances of absorption. As the convulsions came on, we administered chloroform, which seemed to have some effect in checking them. Hot bricks were applied to the cold extremities. The pain becoming apparently worse, we administered hypodermically $\frac{1}{2}$ gr. of morphia with sulphate of atropine. Her pulse continued good, she had no more vomiting, the pain seemed relieved, but we considered it advisable to remain and watch her, which we accordingly did, occasionally giving her a few whiffs of chloroform when the fits seemed impending. These, however, gradually ceased by about one o'clock, and when they did, the stiffness of the neck also disappeared.

A cousin of the girl's, who now came, told us that she was subject to hysterical fits, but was otherwise healthy.

At about two o'clock, we tried to rouse her by the use of the wet towel to the face, but she went into a rigid condition, very like catalepsy, in which she remained. At half-past three an assafoetida enema was administered, and she was left alone for a time. We had now decided that the immediate symptoms were purely hysterical, although the after-effects, from the corrosive action of the acid on the mucous membrane of the stomach, might be more or less severe.

At about half-past six we opened her bowels well by enema, and it was discovered that she was menstruating; she had previously been examined to find out if it were so, but there were then no signs. She was sent to the Melbourne Hospital for further treatment, being still unconscious, semi-rigid, pulse full (between 80 and 90), extremities warm—in fact, her temperature was just below 101° F. She subsequently recovered.

There seem to me to be several points of interest in this case, which perhaps, however, is one rather to place on record briefly in the pages of a journal, than to bring before a society. Although poisoning by carbolic acid is not very common, yet its symptoms, at the present day, are pretty definitely known. The state in which Dr. Fishbourne found the girl, is that described by authorities as being produced by carbolic acid, and in this case evidence of the poison having been taken was present. But it is somewhat strange, that the state of collapse should have been so readily overcome as by one injection of ether. It is uncertain how much of the poison was swallowed, but the patient, while in Hospital, said that she had taken about a tablespoonful. A tablespoonful is set down by toxicologists as a probably fatal dose, and sometimes even this quantity is said to act with a rapidity comparable to the action of prussic acid. Death, especially in these rapid cases, is said to result from cardiac paralysis, according to Wood, and the usual symptoms of collapse, &c., would seem to show an extreme depression of the heart's action; yet in this case, once the circulatory power was restored, it continued active without any subsequent diminution.

Another peculiarity of the case is, that the acid did not produce its customary effect of numbing the mucous membrane. We are sometimes told that, in cases of this kind, emetics are of no use, as the mucous membrane is insensible; but here we found a great tendency to vomit, especially when the stomach-tube was inserted.

A few words as to the probable motive for the suicide, and I

have done. Here I speak with a considerable amount of diffidence, as I certainly cannot claim any special knowledge of mental or nervous cases; however, the members of the Branch will, perhaps, be good enough to look upon my remarks as rather of the nature of suggestion than of assertion. Inquiries were made of the friends and the employer as to any possible reason for the act. The girl's mistress said she had only been in her employ a few weeks, but during that time had been cheerful and well, and there had been no occasion whatever to find fault with her. Her friends alleged that she had no love troubles, or quarrels with her relatives, as far as they knew, and that she had never shown any signs of mental aberration; the only thing she had suffered from was hysteria, taking the form of the usual "hysterical fits." No members of the family, as far as could be ascertained, had been insane. She herself, when she recovered consciousness in the hospital, gave as a reason "home troubles"; but beyond not hearing from her mother, who lives in the country, inquiry could elicit none. It would seem, therefore, not improbable that a temporary insanity, or, at any rate, absence of responsibility, was induced in a person of hysterical temperament—even her facial expression was hysterical—by the onset of the menstrual function producing a "crisis" in the hysterically irritated nervous system.

Mr. Kenny, Mr. Syme, Dr. Maudsley, Dr. Fishbourne, and Dr. Anderson, discussed the paper.

Australian Medical Journal.

SEPTEMBER 15TH, 1889.

THE MEDICAL SOCIETY.

Those who have attended the meetings of the Medical Society regularly for some years, must be struck with the fact that, although the number of members has greatly increased, the attendance at the meetings has not by any means increased in proportion. If the last quinquennial period be taken, it will be found that in 1884, the number of members on the roll was 177, and the average attendance at the meetings was 22; in 1888, the number of members was 235, and the average attendance at meetings was 24. When inquiry is made concerning the reasons for this anomaly,

the opinion is generally expressed, that the meetings are not sufficiently interesting. Old members seem to think that the meetings were more social in days gone by, when men attended often more for the sake of a little friendly chat, than in the hope of gaining very much information; many complain that now the meetings are cold and formal, and that members who practice in the suburbs get very little, from a professional or scientific point of view, to reward them for the trouble of coming into town. Complaint is also made that the reading of papers and their discussion is apt to be confined to a select few, and that the papers are almost always records of individual cases.

What are the actual facts? During the same five years, 1884 to 1888 both inclusive, 74 papers were read, and of these 46 or somewhere about two-thirds, were records of cases. These papers were read by 34 members, distributed as follows:—21 members have read only one paper each, 8 members have read two papers each, 7 members three papers each, 1 member four papers, 1 member five papers, and 1 member seven papers. Thus some slight foundation exists for the above-mentioned statement, but it is not so easy to see why it should be made a cause for complaint, or a reason for non-attendance. Individual cases are recorded at all Societies, and may be as instructive, if properly handled, as a general paper. If a few men take the trouble to prepare papers, the thanks of the Society are due to them, for the papers are often written with the object of preventing meetings from lapsing for want of papers from other members. Still, it may be conceded, that some effort is required to make the meetings more attractive than they appear to be at present. Several expedients have been suggested, such as providing refreshments before or after the meetings, and so affording occasion for friendly meeting; the occasional interpolation of a purely social gathering, in lieu of the usual business meeting; an annual dinner, and so on. It is to be hoped that such efforts to promote a cordial social feeling among members will meet with every encouragement; but still, something more seems required, to make the ordinary meetings interesting in themselves.

The last two meetings of the Society have been much better attended, and have evoked thoughtful discussions. Almost every year there have been meetings at which discussions, full and interesting, have taken place. What is wanted is that such discussions should be more frequent.

The great function of the Society ought to be discussion, and members ought to come prepared to discuss the subjects dealt with. Sir William Jenner once said in a Presidential Address to the Clinical Society of London:—"In every disease, even the most common, there are undetermined questions. Many of these questions admit of answer, many of them ought to be answered, and that many of them are not answered is, I think, discreditable to us as a profession." Let the Medical Society of Victoria deliberately, and with determination, attempt to answer some of the questions concerning the diseases of every-day occurrence, and about which all members ought to be able to say something, although, perhaps, all do not feel able to prepare papers.

Dr. Jamieson suggested in his Presidential Address in 1887, that the Committee might select subjects for discussion, and draw up a short statement of views to be presented, an abstract of which might be circulated some time before the meeting at which the discussion was to take place. The suggestion has never been adopted, and seems to have been forgotten. Nothing, however, would probably be more effectual in rousing interest in the meetings. In order that the discussions should be of any value, it is necessary that members should prepare for them, and the best preparation consists in habitually taking notes of cases, a practice which really does not take much time when it has become habitual. There is too much tendency at the Society for men to give *ex cathedra* opinions, without any very obvious facts or experience in support of them. Such opinions are almost valueless from a scientific point of view, being little more than vague impressions.

It is to be hoped that all members will make an effort to attend the Society meetings, and take a more active part in the proceedings, which cannot then fail to be interesting.

INTERNATIONAL MEDICAL CONGRESS, 1890.

We have received a communication signed by Professors Von Bergmann, Virchow and Waldeyer, stating that the Tenth International Medical Congress will be held in Berlin, from the 4th to the 9th of August, 1890. A cordial invitation to the Congress is offered, and we may add our hope, that some worthy representatives of Australia may be able to attend. Detailed information as to the order of proceedings, will be issued after the meeting of the delegates of the German Medical Faculties and Medical Societies, to be held at Heidelberg, on the 17th September, in the current year.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Melbourne Hospital Committee, on the 3rd inst., Mr. Derbin Willder reported as to the progress made towards relieving the demands on the existing hospitals. He stated that the hospital extension movement had resulted in the sum of £4000 being obtained, in hand and promised, which, with the £10,000 promised by the Premier, left only £1000 still to be obtained to make up the £15,000, which it was their object to obtain, and the Committee confidently expect to raise this sum. Of the £15,000, £7000 would be employed for a new wing at the Alfred Hospital, £3000 on the Homœopathic Hospital, £3000 on the Austin Hospital for Incurables, and £1000 each on the two Convalescent Homes. On the handing over of the £3000 to the Homœopathic Hospital, a donor whose name was not mentioned, would also give £10,000 to that institution. The result would be, that while not a shilling would accrue to the Melbourne Hospital out of the £15,000 raised, it would be relieved to the extent of eighty beds. As to the removal of the Melbourne Hospital, the Treasurer had promised to place £100,000 on the Estimates for the purpose when they were ready, and they would have to raise £25,000 to furnish it. Mr. Williams had reminded him of the tablets erected in the old country, to commemorate the munificence of those who had given £20,000, £30,000, £40,000, and such large amounts, as donations to the hospitals, and he hoped that such tablets would be erected in the Melbourne Hospital also.

At the same meeting, Mr. Williams, the Secretary, read a report on his recent trip through Europe and America, where he

had visited hospitals, both of the old and modern constructions. It was resolved that the report, and so much of the various information collected by Mr. Williams, as he should think necessary, should be printed and circulated for the information of the Committee. The notice of motion for the consideration of the report of the Sub-committee, on the appointment of a medical superintendent, and medical and surgical registrars, was postponed for another month.

CHILDREN'S HOSPITAL.

The annual meeting of this institution was held on the 23rd ult. The annual report of the committee of management included the following statements :—

“Notwithstanding the increased amount of accommodation, both at the hospital and the convalescent cottage, the medical officers have been compelled, during the prevalent period of typhoid fever, not only to permit a dangerously crowded condition of the medical wards, but also to frequently refuse admission to deserving and distressing fever cases. With one exception, the six paying typhoid fever patients treated throughout the year were admitted during the early part of the epidemic. The total number of typhoid fever cases treated during the year was 165.

“The committee wish it to be distinctly understood that, with the small amount of land at their disposal, and the responsibility and necessity for protecting the children entrusted to their care, it has been found impossible for the medical staff to attempt to treat, satisfactorily, infectious diseases. Many such cases are constantly being sent by medical men, or brought by their parents from the city, suburbs, and the country to this hospital. It is a matter for much anxiety and grave consideration to the committee, that scarlatina cases are treated as out-patients only; and that cases of diphtheria, urgently requiring immediate treatment, are almost daily turned away from these doors.”

THE HOSPITAL SATURDAY AND SUNDAY FUND.

The report of the Committee shows that the amount received to the date of audit was £14,415 16s. 8d., being an increase on the preceding year of £4126 16s. 4d.

Of the receipts for the year, £3783 1s. 4d. was contributed by employes in business houses, factories, and on public works; and

£10,632 15s. 4d. was received from places of worship, Sunday and State Schools.

On the usual basis of distribution, the Committee have paid to the

Melbourne Hospital	...	...	£3604	3	11
Alfred Hospital	...	...	1913	3	3
Benevolent Asylum	...	...	1002	3	3
Women's Hospital	...	..	1107	9	0
Hospital for Sick Children	...	...	1876	11	6
Eye and Ear Hospital	...	...	661	18	3
Homœopathic Hospital	...	...	961	14	4
Austin Hospital	...	...	712	12	5
Immigrants' Aid Society	...	...	437	4	1
Collingwood Dispensary	...	...	100	0	0
Richmond Dispensary	...	...	50	0	0
Convalescent Home for Women	...	...	30	0	0
Convalescent Home for Men	...	...	25	0	0

Making a total distribution of £12,482 0 0

The disbursements for printing, stationery, clerical and other assistance amounted to £590 10s., leaving a balance of £1599 6s. 11d. in hand, of which sum, £1400 has been deposited at interest.

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and suburbs for July 1889, shows that the births of 1581 children, viz., 779 boys and 802 girls, were registered. The deaths registered numbered 851, viz., 477 males and 374 females. The births thus exceeded the deaths by 730, or 86 per cent. To every 1000 of the population, the proportion of births registered was 3·61, and of deaths 1·94. One hundred and seventy-seven deaths, or 21 per cent. of the whole, took place in public institutions. The number of children under one year who died was 207, the total number under five years of age being 313.

Deaths from typhoid fever, which attained their maximum in April, were fewer in July than they had been in any month since the beginning of the year. Deaths from diphtheria, on the other hand, continue to increase month by month, and besides the deaths

from true diphtheria, 16 deaths in July and 4 in the previous month were set down to diphtheritic croup—classed as a disease of the respiratory system. Other diseases of the same system were also very fatal in July, no fewer than 128 deaths having been set down to bronchitis and pneumonia, as against 74 in June. Phthisis, moreover, caused 98 deaths in the month under review, as against 65 in the previous month.

DEATHS FROM TYPHOID FEVER AND DIPHTHERIA, 1887 TO 1889.

(First seven months of each year.)

MONTHS.				TYPHOID FEVER.			DIPHTHERIA.		
				1887	1888	1889	1887	1888	1889
January	..	..	..	40	39	70	1	5	15
February	..	..	..	70	63	64	4	2	13
March	..	..	..	59	54	91	3	13	18
April	..	..	..	57	43	113	6	13	26
May	..	..	..	40	32	92	10	19	35
June	..	..	..	15	20	36	7	16	30
July	..	..	..	15	12	17	9	14	48
Total ..	..	..	..	296	263	483	40	82	185

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—Edward Esdale Shiels, Melbourne, L. et L. Mid. R.C.P. et B.C.S. Edin. 1883; Thomas Carr, Melbourne, L. et L. Mid. K.Q.C.P. Irel. 1887, L.R.C.S. Irel. 1888; James Harman Finemore, North Brighton, L.S.A. Lond. 1873, L. et L. Mid. R.C.P. Edin. 1874. Names of deceased medical practitioners erased from the Register:—No. 1241, Francis A. Maciver, M.D. Edin.; No. 1504, Charles Drinkwater, M.R.C.S. Eng.

HEALTH OFFICERS.—The following appointment has been confirmed:—Shire of Dunmunkle (East Riding)—Francis William Wingrove, L.R.C.P., *vice* James C. Hood, M.D., resigned.

PUBLIC VACCINATORS.—The following appointments have been made:—Orbost—James Kerr, M.B.; Rupanyup—Francis William Wingrove, L.R.C.P., *vice* J. C. Hood, M.D., whose resignation has been accepted; Violet Town, Robert Willmot, F.R.C.S., *vice* John Tuthill, L.R.C.S., whose resignation has been accepted; Avoca—Edward Harkness, L.R.C.P., *vice* John McMahon, L.C.P.S., whose resignation has been accepted; North Carlton—Melrose Mailer, M.B.; Coalville—William Perrin Norris, M.B.; Morwell—William Moir, M.B.

VICTORIAN MILITARY FORCES.—The term of service of the undermentioned officers has been extended for a further term of five years from the dates specified:—Surgeon Hubert Lindsey Miller, M.D., 27th June, 1889; Surgeon Herbert Augustus Embling, M.B., 4th July, 1889.

Dr. R. W. Lewers has been appointed Assistant Resident Medical Officer in the Midwifery Department at the Women's Hospital.

Dr. M. Barclay Thomson was appointed Hon. Medical Galvanist to the Alfred Hospital.

Dr. Le Fevre was returned unopposed on the 30th ult., to fill the vacancy in the representation of the North Yarra Province in the Legislative Council, which had been caused by his resignation, arising out of a legal informality in connection with his election some two years ago.

The proposed appointment of a Provost in connection with the Melbourne University, was discussed at a meeting of the Senate on the 3rd inst. The Vice-Chancellor, at a former meeting, had moved the adoption of the scheme drawn up by the Council, defining the powers and duties of a Provost; and at the meeting on the 3rd inst., amendments were submitted in favour of sending the question for consideration to a select committee and committee of the whole respectively. There was a general desire to force a division before rising, and the vote was taken in the Parliamentary form, on a proposal to omit certain words, but was so explained by the Warden, that members were enabled to vote for and against the principle embodied in the statute sent down by the Council. The result of the division was 71 votes for the statute, and 63 against it, or a majority of 8 in favour of the general principle of the appointment of a Provost. At a subsequent meeting, a select committee was appointed to consider the question.

BIRTHS.

BROWN.—On the 24th ult., at Maffra, Gippsland, the wife of William Henry Brown, M.R.C.S., of a son.

MACGILLICUDDY.—On the 10th ult., at 11 Hoddle-street, Richmond, the wife of Dr. D. F. MacGillicuddy, of a son.

O'HARA.—On the 8th ult., at 87 Collins-street east, the wife of Henry O'Hara, F.R.C.S., of a daughter.

SCANTLEBURY.—On the 7th ult., the wife of Dr. G. J. Scantlebury, Linton, of twins (prematurely).

WILLIAMS.—On the 22nd ult., at 57 Collins-street, the wife of Dr. J. Williams, of a daughter (stillborn).

MARRIAGES.

ADAM—FERGUSON.—On the 16th ult., at the Scots' Church, by Rev. Alex. Adam, M.A., father of the bridegroom, assisted by the Rev. Alex. Marshall, M.A., Basil J. Adam, M.B., C.M., to Isabella Byrne, youngest daughter of late Francis John Ferguson, Esq., Glasgow.

CUNNINGHAM—GOODMAN.—On the 13th ult., at Talbot, by the Rev. John Nichol, Peter Hannah Cunningham, M.B., C.M., Talbot, to Katie, eldest daughter of Mr. Wm. Goodman, of Talbot.

HOWITT—YOUNG.—On the 15th ult., at St. George's Church, East St. Kilda, by the Rev. J. G. Mackie, Dr. Godfrey Howitt, Toorak, eldest son of the late William Godfrey Howitt, M.R.C.S.E., to Lily, daughter of Charles Young, Abbeyville, The Avenue, Windsor.

JOSE—ISAACS.—On the 8th ult., at Fairholm, Walsh-street, South Yarra, by the Rev. Dr. Abrahams, Dr. A. S. Joske, of Greville-street, Prahran, to Louise, second daughter of George Isaacs, Esq., J.P.

POOLMAN—NESBITT.—On the 29th of June, at the parish church, Abergavenny, by the Rev. Thomas Williams, M.A., rector of Aston, Clinton Bucks, assisted by the Rev. Canon Capel, M.A., Arthur Edward Poolman, B.A. (Syd.), M.R.C.S., L.R.C.P. (Lond.), second son of Frederick Poolman, of Melbourne, to Elizabeth Eleanor, eldest daughter of the late Joseph Nesbitt, of Garmston-house, Lincoln.

DEATHS.

CUSCADEN.—On the 5th inst., at 386 Bay-street, Port Melbourne, Dorothea, only daughter of George Cuscaden, surgeon, aged 5 months and 14 days.

FORD.—On the 15th ult., suddenly, Charles Powlet Ford, solicitor, second son of F. T. West Ford, surgeon, of this city, aged 31 years.

SCANTLEBURY.—On the 7th ult., at Linton, the infant son of Dr. G. J. and Katie Scantlebury.

WILSON.—On the 18th ult., at his residence, Macalister-street, Sale, of brain fever, Samuel Wilson, surveyor, fourth son of Thomas Wilson, Esq., M.D., Dunnain, Princess-street, Kew, aged 37 years.

THE
Australian Medical Journal

OCTOBER 15, 1889.

Original Articles.

CASE OF CEREBRAL ABSCESS, FOLLOWING SUP-
PURATIVE EAR DISEASE — TREPHINING —
EVACUATION OF ABSCESS—DEATH.

By C. L. M. IREDELL, M.R.C.S.

On 30th May, 1889, G. R., æt. 25, consulted me, complaining of severe headache and profuse discharge from left ear. There was a large perforation, tenderness *above* the mastoid process, giddiness, an exceedingly foul tongue, and constipation, but no rise of temperature or increased rapidity of pulse. The eyes at this time were not carefully examined, but the whole condition caused me to give an immediately unfavourable prognosis (although up to this time he had been under treatment for bilious headache). The same afternoon I drilled, opening the mastoid cells. No pus was found, but a certain amount of relief from pain followed for some twenty hours, when the pain again returned severely, and was referred to the temporal bone and occiput. I told the friends that I feared the presence of cerebral abscess; but as his parents were then on their way from New Zealand, I could not obtain permission to operate until June 7; the patient being then only with difficulty roused from semi-consciousness. Drs. Grant and Fred. Bird agreed with me in consultation, that an abscess should be sought for, and Dr. Grant favoured the idea of cerebellar abscess. Accordingly, at my request, Dr. Fred. Bird trephined the occipital bone, and examined the left lobe of the cerebellum, without finding pus. As the patient was now *in extremis*, I determined to go one step further, and myself trephined at a point one inch behind, and one above, the meatus. On removing the plate of bone, the membrane appeared healthy, and not until a hollow needle had been thrust a full inch into the temporo-sphenoidal lobe, did pus come out. About three-quarters of an ounce of stinking pus was withdrawn. The only distinct effects produced by this evacuation, were a quickening of the pulse

(which had previously been about 50) to nearly 100, and an alteration of the respirations from the character described by Cheyne Stokes, to that of greater regularity. Patient died about ten hours after operation. To complete this history, it should be mentioned that the patient had suffered from otorrhœa in the left ear since infancy.

A post-mortem examination by Dr. Maudsley revealed a large encysted abscess cavity, with thickly developed walls, and softening of surrounding tissues. Dr. Maudsley was of opinion that the abscess must have been of at least two month's formation. Subsequently, the father informed me that the patient had complained of headache, referred to that side as long ago as last Christmas, and that he believed this had continued without intermission. If this was so, it is interesting to note the great extent of injury which this portion of the brain may incur for a lengthened period, without giving rise to urgent symptoms.

Appended are some notes on the operation, by Dr. Fred. Bird ; and also the notes of the autopsy, by Dr. Maudsley :—

• *The Operation.*—The parts were cleansed as much as possible, and an incision made down to the bone, from the hinder aspect of the mastoid process backwards for about two inches, at a level half an inch lower than the line of the lateral sinus. With a raspatory, periosteum and muscles were pushed downwards until the inferior curved line of the occipital bone was met with; in order to gain room for the trephine to be applied below this line, a second incision was made at right angles to the first, dividing an unusually large occipital artery. The bone, which is very thin in this position, was soon pierced by a small trephine, and on removing the ring of bone, the dura mater was found bulging into the hole, and also pulsating. A fine trochar was inserted at right angles to the exposed dura mater, and pushed gently on until the tentorium cerebelli was felt, but only a core of cerebellar tissue was removed. Two further explorations were made, with a similar result. The original conditions for searching for abscess remaining the same, and the pus not being in the cerebellum, it was decided to explore the middle of the temporo-sphenoidal, which operation was performed by Mr. Iredell, who found foul-smelling pus contained in a cavity, the trochar having previously traversed a depth of an inch and a half of brain substance. Here the dura mater did not bulge, nor did it

pulsate. The first operation was conducted practically on the lines laid down by Barker; in the second, the point trephined was an inch in front of the point suggested by the same author.

The facts of practical interest which I gained from this case, are these:—In the first place, with regard to bulging and pulsation of the dura mater; into the wound in the cerebellar region there was marked bulging and pulsation synchronous with the heart's beat. After some exposure, and three punctures, the bulging disappeared, but the pulsation remained; in the other case, there was neither pulsation nor bulging. This is my interpretation, viz.:—That increased intra-cranial pressure, due either to tumour, ventricular dropsy, or abscess, will produce bulging in a trephine hole over any part of the brain, because there is a general diffused increase of fluid pressure within the cranial walls; but that over the region of direct pressure—that is, in the immediate vicinity of the abscess or tumour—the brain surface in the trephine hole will bulge, but will not pulsate. Thus, marked bulging in any cranial trephine hole, points to increased pressure, due to a cause somewhere within the cranium, and absence of pulsation with it, the immediate vicinity of the cause, be it abscess or tumour; so that if we trephine in the wrong place the first time, marked bulging in the trephine hole will be an indication for continuing the search elsewhere, especially when we remember that the operation of trephining in itself is almost harmless. Again, the cerebellar trephine hole, after the lapse of a few minutes, and three punctures, showed no bulging, as if the intra-cranial fluid pressure had been equalised, although only a small amount of fluid exuded; this equalisation of pressure would account for the second hole showing no bulging, although there was a large abscess beneath, which however, prevented pulsation.

Again, the necessity of diving some distance into the brain tissue was further impressed upon me, as over an inch of substance had to be pierced before the abscess was reached. Finally, in the next case which occurs to me, I should as a matter of rule trephine first in the temporo-sphenoidal region, however much the symptoms pointed to cerebellar abscess, for two reasons—first, because by far the larger number of abscesses, resulting from ear disease, occur in this region; and secondly, that while trephining above the ear is comparatively an easy proceeding, opening the skull below the inferior curved line, within an inch of the foramen magnum, is decidedly more formidable. Thus I should perform the minor

operation first, and if this failed, the reasons for diagnosis of abscess being really unaltered, I should try the major trephining in the cerebellar region.

Post-mortem examination of the skull and brain sixteen hours after death.—There was no œdema of the scalp. Immediately behind the left ear, over the mastoid process, was a linear incised wound about half an inch long, leading down to the mastoid bone, and into the mastoid cells. About an inch and a quarter above the internal auditory meatus, and the same distance behind, was a flap wound of the scalp, and a trephine opening into the skull, from which brain matter and greenish pus exuded. There was a flap wound over the occipital bone, below the curved line, and a small trephine opening into the skull in this situation. No brain matter escaped from this opening. The vault of the skull was normal. The vessels of the brain were somewhat congested, chiefly in the posterior part. There was no sign of old or recent inflammation of the pia mater or arachnoid. The dura mater, with the exception of that over the roof of the left tympanum, was normal. The brain, with the exception of the left temporo-sphenoidal lobe, was normal, being perhaps a little drier and stickier than natural. There was a slight excess of fluid in the lateral ventricles. In the left lobe of the cerebellum, the track of a needle was marked by a little extravasated blood. The left temporo-sphenoidal lobe, in its middle convolution, presented an opening corresponding to the trephine opening in the skull, from which green foetid pus escaped. On slicing this lobe, an abscess cavity capable of holding between one and two ounces of pus, and containing about half an ounce of greenish foetid pus, was seen in the white substance of the lobe. The wall of the abscess cavity was fibroid, and of considerable thickness. The cavity was entirely in the white matter. The brain substance around, for a zone of about half an inch, was softer than natural, and of a greyish colour, especially that over the roof of the tympanum. There was no sign of inflammation of the pia mater over the lobe. The dura mater, over the roof of the tympanum, was of a dirty grey appearance. It was easily stripped off, and between it and the bone was some dirty pus. The roof of the tympanum was discoloured and carious. There was no thrombosis in any of the sinuses of the skull.

INTRA-OCULAR HÆMORRHAGE, FOLLOWING CATARACT EXTRACTION.

By JAMES W. BARRETT, M.D., M.S., F.R.C.S. Eng.

Assistant Surgeon to the Victorian Eye and Ear Hospital.

The above accident is fortunately rare. A. B., aged 40, received a blow on the right eye with a chip of stone. When I saw him at the Eye and Ear Hospital six weeks later, it was evident that the cornea had been wounded, and the anterior capsule of the lens opened. Soft lens matter was present in the anterior chamber, and the whole lens was much swollen and softened. Tension + 2.

The lens was extracted through a small upward section made with a Graefe knife in the sclero-corneal margin. Iridectomy performed; vitreous escaped to the extent of about one-sixth, and some of the soft lens had to be removed with the scoop. The extraction appeared successful, and the eye was bandaged up and the patient put to bed. Soon after, intense pain in the right eye was complained of. It was relieved by morphia, but reappeared about eight hours after the operation. Between four and six hours after the operation, blood was noticed oozing through the bandages.

Next day, the bandages were removed, and the eye was found to be totally destroyed; a portion of the vitreous was protruding through the gaping wound, and the eye was filled with blood. It was excised a day or two later.

Here, it seems that choroidal vessels, subject to glaucomatous pressure, gave way on the reduction of pressure to subnormal. It is noteworthy, that they did not give way at the time of operation. It would seem to be advisable to apply a very firm bandage in cases of extraction in which there is any glaucomatous tendency.

I am indebted to Dr. Craig, the House Surgeon, for the foregoing notes.

A CASE OF PARALYSIS OF THE ABDUCTORS OF THE VOCAL CORDS.

By JAMES W. BARRETT, M.D., M.S., F.R.C.S. Eng.

Assistant Surgeon to the Victorian Eye and Ear Hospital.

Cases of the above disease are comparatively rare, and are worth recording in brief.

A.B., aged 22, delicately built girl, of nervous temperament, had suffered for four months from wheezing whilst drawing in her breath. When I saw her, August 1, 1887, there was marked

inspiratory dyspnœa, accompanied by stridor; voice feeble, but distinct. Seen with the laryngoscope, the vocal cords were closely approximated during inspiration, leaving only a narrow chink through which the air passed. During attempts to phonate, the glottis was opened more widely. For a few days I kept the patient under observation, and noted that the degree of failure of the abductors varied.

There was no doubt that one had to deal with a case of abductor paralysis, but the causation was not clear. I felt uncertain as to the degree to which the hysterical element was present in the case. The girl had been under general treatment for some months. The occurrence of several fits of dyspnœa, during which she was said to have become blue in the face, decided me to at once perform tracheotomy, a resolution which was endorsed by Dr. Iredell, who kindly assisted me at the operation. After recovery from the immediate effects of the operation (the low one), vulcanite non-perforated canulæ were inserted, and have been worn ever since, a period of nearly two years.

For two or three months after the operation, the patient improved in general health, the voice strengthened and the abductor failure apparently lessened. Then she deteriorated in health, becoming very thin and weak, the laryngeal voice disappearing. Although the relatives prevented me from adopting some therapeutic measures which I should have liked to try, yet, during many months, I systematically made attempts to improve her general health by tonics, careful dieting, changes of air, and periodic muscular exercise. The laryngeal muscles were Faradised two or three times a week during the same period. The sittings lasted from five to fifteen minutes, and the current was graduated from an exceedingly weak one in the earlier sittings, to an exceedingly strong one in the later. For a brief period, whilst away for a change, the voice returned, but disappeared again, and the patient is now in the unsatisfactory state above described.

CASE OF PURULENT PERITONITIS TREATED BY INCISION—RECOVERY.

By T. F. FLEETWOOD, M.B. Dub. F.R.C.S.I.

On May 2, 1889, I was sent for to see a little girl, S., æt. 10. She was suffering from an acute bilious attack (vomiting, purging, motions bilious, feverish, coated yellow tongue).

May 7.—Much better.

May 16.—Motions hard, pipe-clay colour ; urine dark.

May 20.—Irritable cough, decubitus on right side, and right chest enlarged, so that I suspected pleuritic effusion, but never found any trace of fluid in the chest.

May 27.—No distension of the abdomen.

May 30.—Abdomen full of fluid, dull all over, and of peculiar shape—bulging more in the umbilical region than I had ever seen in ascites, and not bulging in the flanks. Respirations quick ; pulse quick and feeble ; decubitus still on the right side—there had been shivering and night sweats for the two previous nights. With Dr. Scott's assistance, I punctured the abdomen with a trocar, below the umbilicus in the middle line, and got pus ; consequently, we enlarged the opening, evacuated a quantity of pus, and washed out the abdomen with a Higginson's syringe, using first a solution of perchloride of mercury and salt, afterwards hot water ; besides the pus, which was sweet, we washed out a quantity of lymph in large masses ; we then put in a drainage tube, and dressed the wound with salicylic wool.

June 1.—No pain or feverishness, only wanting more food. Not much pus on the wool, but I pressed out about two ounces of thick sweet creamy pus from the flanks.

June 9.—Bowels acted for first time, after calomel and castor oil. As a little pus still flowed on June 16, I inserted a longer tube, and gave magnes. sulph. and ferri sulph., to keep bowels free.

June 21.—Pus thin, and very scanty ; left out tube.

June 23.—Wound closed ; put patient on cod liver oil as she was very wasted, the short irritable cough had returned (it was absent since the tapping).

July 8.—Wound perfectly healed, gave her leave to sit up.

August 6.—She walked up to see me about three-quarters of a mile, looking healthy and strong, and said she felt as well as ever, and wanted to go back to school.

Morris, in the "Encyclopædia of Surgery," under the head of diffused abscess of the peritoneum, says, "the cause of the suppuration is generally obscure ;" and again, "after a period of ill defined illness, with symptoms suggestive of some abdominal disease, the abdomen will become irregularly swollen, and of peculiar shape." The above case confirms both these statements. The insertion of a longer drainage tube on June 16, by securing

more complete drainage, was probably the means of stopping the secretion. I was sorely tempted to wash out the abdomen again, but decided to try a longer tube first, and it proved successful.

NOTE ON IODISM FROM A SINGLE INTRA-UTERINE APPLICATION.

By G. ROTHWELL ADAM, M.B. Edin., Ch. M.

Hon. Physician, Women's Hospital.

The intolerance of many patients of iodine in any form, is an idiosyncrasy known to every practitioner ; but it is usually after its administration per ore, and in the form of potassium iodidi, that unpleasant effects are seen in a typical manner.

Mrs. P., æt. 27, multipara, with a large, heavy, retroverted uterus, consulted me on the 10th of September. The uterus was straightened up, the sound entering three and a half inches, and a glycerine tampon applied ; hot vaginal douches were also ordered. On the occasion of her second visit—some three or four days afterwards—I proceeded to make an intra-uterine application of Churchill's iodine formula :—Iodine 75 gr., potass. iodid. 90 gr., spt. V. R. 3i., on a Playfair's probe, for the relief of the endometritis. Not much pain was complained of at the time, but on rising from the couch, the pain increased to such an extent that the patient had to again lie down and have hot poultices to the hypogastrium, and morphine freely given. In about two hours' time, she had sufficiently recovered to be sent home in a cab, in charge of my nurse, who put her to bed and administered a half grain morphia suppository.

On visiting her on the following morning, I found her fairly free from pain, but suffering from well-marked iodism, suffusion of the eyes, coryza, &c., which subsided in a couple of days ; but both upper eyelids were pigmented, and eventually desquamated. The pulse and temperature remained normal throughout, notwithstanding that the patient was excitable and restless.

It is somewhat remarkable, that iodism should develope after so small a dose of the drug, and be so pronounced in its effects. The only reasonable explanation that presents itself to me, is that, with a large retroverted uterus, the application caused violent spasm, which squeezed the iodine into the sub-mucus tissue, where

it has been rapidly taken up by the blood-vessels, and absorbed into the general circulation. This, with great sensitiveness to the drug, may possibly have brought about the symptoms of iodism.

Byford, in his book, mentions that he has more than once observed that, after several applications of mercurials to the cervix or endometrium, patients have complained of a metallic taste in the mouth; but I think it is unique to have iodism after a single application of even a strong preparation of iodine to the endometrium.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, OCTOBER 2ND, 1889.

(Hall of the Society, 8 p.m.)

The President, Dr. BALLS-HEADLEY, occupied the chair, and there was a fair attendance.

The minutes of the preceding meeting were read and confirmed.

The following gentlemen were elected members of the Society:—
Edwin John Gurdon, M.R.C.S. Eng., L.R.C.P. Edin., of Brighton, proposed by Dr. Williams, and seconded by Dr. J. P. Ryan; John Timothy Kennedy, L. et L.M.R.C.P. et R.C.S. Ed., L.F.P.S. Glas., of Cobram, proposed by Dr. O'Sullivan, and seconded by Dr. Meyer; Edward Francis O'Sullivan, M.D. et Ch. M. R. Univ. Irel., L.M.K.Q.C.P.I., of Yarrawonga, proposed by Dr. O'Sullivan, and seconded by Dr. Adam.

The PRESIDENT stated that the Sub-Committee appointed to deal with the Amending Medical Bill, had seen the Attorney-General and the Premier. These gentlemen received them very graciously, but gave no definite promise with regard to the introduction of the Bill. The Sub-Committee had also seen Mr. Service, who promised his support, and suggested some valuable changes in the Bill.

The PRESIDENT also mentioned that the Committee had considered the advisability of reviving the Annual Dinner of the Society, and it had been decided that the Dinner should be held on the evening of Wednesday after Cup Day.

Mr. CHARLES RYAN exhibited "A Case of Bow Legs," successfully operated upon, with a photograph of the case prior to operation. The child was only three years old, and weighed four stone. He had subcutaneously divided the bones in two places with an osteotome, fractured them, and straightened the limb. Splints were then applied, to maintain the improved position. In this case, he did not think the curvature of the bones was due to rickets, because there were no other evidences of that disease. He thought the excessive weight of the child was the cause of the curving of the legs. (See accompanying photographs.)

Mr. SYME agreed with Mr. Ryan, that there were no other evidences of rickets, but the curves in the bones were exactly the same as those that occurred in rickets. He congratulated Mr. Ryan on the result. In similar cases, he had seen English surgeons remove a wedge-shaped portion of the bones, but the operation performed by Mr. Ryan was much simpler, and equally efficacious.

The PRESIDENT considered the case of great interest. He had seen similar cases where the body was too heavy for the legs, and by directing the parents to apply splints that prevented the children from walking, the tendency to bowing had been overcome. He had no doubt, that the case was not ricketty. The bones, when they bend, from whatever cause, no doubt always assume the same curves. In rickets, the soft bones give way under the normal weight; in this case, the normal bones had given way under an excessive weight.

The following paper was then read :—

A PROPOSAL FOR UNIFYING THE DOSES OF DRUGS.

BY JAMES W. BARRETT, M.D., M.S., F.R.C.S. Eng.

Up to the present, there has been no method of measuring the amount of mental work done by an individual. There is no unit of mental work, and there is no means of expressing mental work in terms of any other force. It is quite impossible to say that an individual, in committing to memory any series of facts, has done the equivalent of so many kilogrammetres of work.

Through our whole lives, there is a perpetual loss of force, owing to the misdirection of energy; and it would be interesting indeed to express in kilogrammetres, the entire loss of work during our





lives, engendered by our own stupidity. This misdirection of energy is noticeable at school, and seems to me to be also very noticeable in the medical curriculum at the Melbourne University. The simple proposal I am about to make this evening, has for its object the conservation of much of the energy of students, the conservation of some of our own energy, with increased facility to acquire therapeutic knowledge.

I find that, in my own practice, I order somewhere between thirty and fifty drugs in the course of the year, and I find that other practitioners appear to use much the same number. Probably, there are drugs in the pharmacopœia which would answer my purpose better than some of those I use, but I don't know their doses unless I look them up, and consequently (especially if they are poisons), I rarely make a change.

Students at the University waste much energy in committing to memory the doses of the different drugs; they forget them a month after the examination, and by the time they reach the practitioner stage, their knowledge of the doses is comparatively rudimentary.

I believe that, of the practitioners present this evening, a fair percentage would be quite unable to give the doses of preparations of the alkaloid poisons accurately.

It seems that the remedy is very simple—unify all the doses. For example, make the doses of all powders ten grains, by making up the difference between the average dose and ten grains with some neutral ingredient, such as sugar. Ten grains would then be the average dose for an adult of powders, whether it was strychnia, santonin, or Dover's powder. Similarly, the doses of all tinctures might be made one drachm, by diluting those of smaller dose up to the required amount. The doses of all pills might be made five grains, by the addition of confection of roses in cases in which the dose of the active ingredient is less than five grains. And so on right along the line. A few exceptions would have to be made in the case of substances which have very large doses, but I can see no serious objection to such an alteration in general.

If adopted, the effect would be to save students' time and energy, to increase their effective knowledge; to increase our own therapeutic knowledge; and lastly, but not leastly, it would tend to the avoidance of dangerous mistakes in dispensing.

Mr. KENNY was of opinion, that such a change as that proposed by Dr. Barrett would be very difficult to introduce, and reminded members of the great difficulties experienced in introducing the metric system into England.

Mr. HOOPER inquired whether Dr. Barrett had consulted any practical pharmacists on the subject; and if so, what their opinion was.

Mr. SYME sympathised thoroughly with the proposal, though he saw difficulties in the way. He suggested that the Pharmaceutical Society should be asked to consider the question. Why should we not have an Australian Pharmacopœia, which should contain Australian drugs, and from which all obsolete and little used preparations should be abolished.

The PRESIDENT thought the change proposed by Dr. Barrett would be very excellent. One objection suggested itself—the dose in very many cases would be greatly increased, the modern tendency was to reduce the dose as much as possible. The magnitude of the change would, he was afraid, prevent its general adoption.

Dr. BARRETT, in reply, said that he had not consulted any pharmacists on the subject recently. The non-introduction of the metric system into England, was simply a standing evidence of British obstinacy and stupidity.

The following paper was then read :—

NOTES OF A CASE OF SUPRA-PUBIC LITHOTOMY.

By C. S. RYAN, M.B. Ed. et Melb., Ch. M. Ed.

J. G., æt. 58, admitted into the Melbourne Hospital on 17th of May, 1889. Single, a hawker, born in Ireland; has worked on a farm for many years. Has never been a drinking man; never had stricture or gonorrhœa; no history of specific disease. Never had any trouble with his genito-urinary organs until three weeks ago; no history of rheumatism or any infectious disease. Family history good, none of his relations ever having suffered from any bladder trouble.

On examination, he is in a feeble state of health, being thin, and showing evidence in his countenance of having suffered pain. He has three small ulcers on the left leg (non-specific), and some acneform eruption on his arms and back. His pulse is hard and full (78), irregular, missing one beat in sixty. He has a loud

systolic mitral bruit. He smells very strongly of ammoniacal urine; so much so, that the patients on each side of him have objected to his proximity to them.

Three weeks ago, he commenced to have difficulty in retaining his water; up to that time he was quite well. On micturition, his water comes away in dribbles, causing great pain at the point of the penis after passing his water, but not during the act. Urine stops suddenly occasionally, causing great pain in the bladder. Has no pain in the thighs or legs; never at any time has passed blood.

On examination by a sound, a large and apparently soft stone is immediately discovered. Urine—sp. gr. 1012, alkaline, with heavy white deposit, yielding with nitric acid, or on boiling, a heavy albuminous precipitate.

Patient was kept in bed; his bladder, which was small and contracted, containing not more than four or five ounces, was daily washed out with a solution of warm boracic acid. His bowels were attended to, and on the 23rd I operated on him. Chloroform was administered, a bag was inserted into the rectum, and blown out; his bladder was also distended with a boroglyceride solution. I performed the ordinary operation of supra-pubic lithotomy. No difficulty was experienced in getting into the bladder, and no bleeding occurred. After opening the former, I passed my forefinger in, and felt a large stone projecting high up on the right side. This I seized with a pair of forceps, but being very soft and porous, it broke into three pieces, which I subsequently removed. I then thought that the operation was finished, but I happened to examine the fragments, when I noticed that the lower fragment, removed last, had a break in it, as if broken off from some other portion of stone. On re-introducing my finger, I was able, with some difficulty, to discover a small portion of roughened stone projecting slightly into the bladder. Thinking, from very casual examination, that I had to deal with a stone imbedded in the prostate gland, I introduced a grooved staff, and performed perineal cystotomy, but discovered no sign of a stone. I then carefully examined the bladder again, by passing my finger through the supra-pubic wound. I then found a large stone encysted in a pouch, but communicating with the bladder through an opening about a quarter of an inch in diameter. From my examination, I was able to make out that I had to deal with a large encysted stone. I endeavoured, with my finger, to break

away the walls of the bladder from the stone, but was quite unable to enlarge my opening, or move in any way the stone. I then got hold of a pair of curved scissors, and tried very gently to insinuate the blades between the stone and the bladder-wall, but again was unsuccessful. I also tried a curved Volkman's spoon. I was now fairly at a loss to know what to do, and thought that perhaps it would be impossible to remove it, and that the best thing I could do would be to leave it alone. I thought of using a knife, and cutting through the wall to a slight extent, but I felt certain that any incision I could make large enough to evacuate the stone, would necessarily cut right through the wall into the abdominal cavity. Lying on the instrument table was an osteotome, which had been used by Mr. FitzGerald a few minutes previously in an operation for talipes. This I seized, and passing it gently into the bladder, I commenced to work it on the stone, every now and then pushing it with a considerable degree of force into its centre. By this means I was able, after a few minutes, to bore a hole. I then broke down, with a scoop, the sides of the stone, and removed the debris. I continued to act and chisel in this manner with the osteotome, until I had broken and taken away more than half. I then tilted up the base of the stone, and with a pair of forceps, removed it with some considerable difficulty out through the opening. This portion of the stone was firmly adherent to the sac. I then passed down a scoop, and scraped away some particles which were adhering to the walls of the cavity. The operation lasted altogether about an hour and a quarter. During the whole of this time, pretty profuse hæmorrhage was taking place, and the condition of my patient was so low that I thought, as indeed I believe everybody else did, that he would die on the table. I thoroughly and completely washed out the bladder, getting rid of all the debris by a warm solution of antiseptic lotion; and I passed a long tube, perforated, in through the supra-pubic opening, and out below through the perineal wound. No sutures whatever were used; the wounds were dusted with iodoform, and dressed with perchloride gauze.

May 23, 8 p.m.—Patient is feeling very easy, very slight pain; bladder draining well. Pulse 90. Had slight vomiting; champagne ordered; takes food well (milk and water). Temperature, evening 101°; morning 99°.

May 24.—Temperature, evening 100°; morning normal.

May 31.—Pulse 90°; temperature normal, evening and morning. Bowels open; tongue slightly coated; wound looking well. Slight discharge; bladder syringed out daily with boroglyceride, and wound dressed with iodoform.

June 6.—Temperature normal. Bowels open. Draining well.

June 10.—Temperature 99°.

June 11.—Temperature, evening 101°; morning 100°. Complaints of pain; wound looking well.

June 12.—Temperature, evening 100·5°; morning 100°. Pain in the right hypochondriac region; not taking food well, but very thirsty; drinks a good deal of water. Dressings have to be changed as often as they get saturated with urine. Chest examined, but nothing abnormal discovered. Has a cough.

June 13.—Feels a little better. Wound draining freely. Cough slightly better. Temperature, evening 100·6°; morning normal.

June 14.—Temperature, evening 99°; morning normal. Cough better. Slightly delirious last night; wounds looking well.

June 23.—Temperature normal. Eyes very sore. Slight purulent discharge. *R* Zinci. acet. gr. vj, aquæ 3j, ft. lotio, t.d.u. *R* Hst. seneg. et ammon., t.d.s.

July 1.—Urine examined—sp. gr. 1012—neutral. Slight amount of phosphates. Good deal of albumen. Deposit examined microscopically, consisted of epithelial cells, white corpuscles, and phosphates. Soft catheter passed per urethram, and tied in to allow the upper wound to heal; but the catheter slipped out during the night. Temperature normal.

July 6.—Hare-lip pins inserted on each side of the wound, to bring the edges together, and wire put round.

July 7.—Urine still oozing through the upper wound.

July 26.—The wound has completely closed; feels very well; eats well; sleeps well. Temperature normal, night and morning. Urine examined—sp. gr. 1010—neutral in reaction. Slight trace of albumen. Slight amount of phosphates. Sediment consists chiefly of mucus.

July 31.—Patient is walking about; feels quite well; passes his urine by the natural way.

This case presents several points of interest. There is no doubt, but the encysted stone was probably in the sacculus for a long time, and it was only when the stone began to develop in the bladder itself, that it gave rise to symptoms; the earliest of these was three weeks prior to his admission; so that it is reasonable

to suppose that the smaller, or bladder stone, had formed in that time. You can see by its consistence and porosity, that it had evidently been rapidly developed. It is not uncommon in the recorded cases of encysted stones, to find that they have been preceded by hypertrophy of the prostate gland, which leads to thickening of the muscular coats, and not unfrequently to the formation of thin *sacculi* or *diverticuli*, which are formed by the mucous coat slipping between the muscular fibres. Such may have been the origin of the *diverticulum* or cyst in this case, in which the stone gradually formed. On examining the stone removed from the sac, you will see that it is much harder than that in the free portion of the bladder, and it is impossible to say how long it had been there, as it only gave rise to symptoms when it began to irritate the wall of the bladder. It occasionally happens, that encysted stones are found in the bladder on the post-mortem examination, when there were no symptoms whatever to suspect their presence during life. It is unfortunate, that I did not keep all the *débris* removed. I do not think that I show you more than half; it must I think have weighed altogether between three and four ounces. You will see, by examining the specimen, that the shape of the stone is like that of a dumb-bell; but the largest portion was encysted. You will notice that, where the stone is broken off, its diameter is less than a quarter of an inch, and the diameter of the encysted stone is about at least two inches, so will lead you to understand the extreme difficulty I had in its removal. Had it not been for its soft character, it would have been an absolute impossibility to have removed it. Indeed, when I had been at work about half an hour, I was nearly giving up this operation, as it seemed to me to be almost impossible to get it out. Had it not been for my friend and colleague, Mr. Syme, I do not think I should have been successful. He assisted me, both by his advice, and by relieving my fingers when tired, by taking and working the *osteotome* and scoop himself.

Erichsen, in his work on "Surgery," makes the following remarks with regard to encysted stones. He says:—"When a calculus is encysted, its extraction will probably be impracticable, or attended with the most dangerous consequences. Here it is expedient not to operate in cases of encysted calculus that are known to be such. If, however, the surgeon has been unfortunate enough to cut into a bladder containing an encysted calculus, he must be guided in the course he should adopt by the conditions in which he finds the

stone. If the aperture leading into the cyst be very small, the better plan will be to proceed no further with the operation, as it will be clearly impossible to remove the stone. If, on the other hand, the aperture into the cyst be large, he might feel disposed to make an effort to extract the calculus. With this view, he might adopt the plan pursued by Sir B. Brodie in such a case, and endeavour to enlarge the orifice of the cyst, by means of a probe-pointed bistoury cautiously applied, and then finish the extraction by means of the scoop. Such a proceeding, however, is in the highest degree hazardous, on account of the readiness with which the section may extend into the peritoneal cavity, as well as difficult in execution, from the depth at which the parts are lying."

Cases of encysted stone are more or less rare, and those where you are able to remove them are still rarer, and I have thought this case well worthy of record, as showing the difficulties that may be overcome, and as showing to what extent the bladder may be bruised and pulled about, and yet end in perfect recovery.

Mr. HOOPER asked how Mr. Ryan supported the stone during the chiselling process.

Mr. RYAN said that the stone was practically unsupported. Mr. Syme had his finger against it, passed through the perineal wound, but was unable to really support the stone, which must have rested against the pelvis.

The following paper was then read :—

NOTES ON THREE CASES OF BAD COMPLEXION.

By HERMAN LAWRENCE, M.R.C.P.E., &c.

The term, "a bad complexion," is one of late adopted by skin specialists to denote an unhealthy condition of the skin of the face, owing to the presence therein of one or more distinct disorders.

The affections constituting this condition, are the following :—*rosacea*, *comedones*, *acne* in its many varieties, such as *acne vulgaris*, *acne indurata*, *acne pustulosa*, *acne artificialis*, *acne varioliformis* (the latter a very rare form of *acne*; I have only seen two cases—one during nine months' assistantship to Dr. Jamieson, at the Royal Infirmary, Edinburgh, and the other at the St. Louis Hospital, Paris), and moles, freckles, &c.

In complex cases of bad complexion, that variety of *acne* which is called *vulgaris*, is usually the most prominent constituent

—so common indeed, is *acne vulgaris*, that even reckoned among diseases of the skin generally, it ranks second in frequency, or next to *eczema*.

In my analysis of 1000 consecutive cases of skin disease, met with in private practice by Professor McCall Anderson, of Glasgow, there are 120 cases of bad complexion, and of this number, 68 are *acne vulgaris*, being 6·8 per cent.; whilst of *eczema*, there are 329 cases recorded, being 32·9 per cent.

In Australia, I believe the percentage of these diseases would be much greater, as the parasitic diseases, including favus (perhaps never seen at all in this country), lupus, lichens, and many other skin diseases, are comparatively rare.

Of 250 consecutive cases recorded at the skin department of the Melbourne Hospital by Dr. Stirling, there are only two cases of *acne* of the face—one being an *acne sycosis*, or lupoid *acne*; the other, a case of syphilitic *acne*.

The following three cases combine to show the latest treatment of some of these affections of the face :—

CASE I.—M. A., *æt.* 22, engineer, strongly built, apparently in good health, came to me suffering from pimples and blackheads (in his own words). His face was covered with *acne vulgaris* and comedones; some of the latter, by the addition of foreign matter to the exposed sebum, appearing as black spots, and so giving rise to the term blackheads. The skin of the face was in a coarse greasy condition, as met with in such cases.

I advised the patient to steam his face for three or four minutes, then wash with warm gruel and rub briskly with a soft towel, night and morning. At night time, to use an ointment containing resorcin—this drug, according to Professor Unna, acting as a kerato-plastic agent, making the swollen and defective layer of the skin harder, thicker, and drier, so that it may again become more fit to take up fat. During the day time, to use a sulphur and calamine lotion, followed by dusting with salicylic talc powder. In order to relieve the distended follicles of their retained sebaceous secretion, on the third day I operated on the follicles with Bulkley's silver comedone tube, removing a great number of the so-called blackheads. The operation was repeated every other day; but finding many of the meatus folliculorum resisted the treatment, and that the pressure needful to express the sebum by the comedone tube would bruise the surrounding tissue, I then had recourse to an instrument I have

had made for such cases ; at one end it is pointed, falling $\frac{1}{8}$ inch in $\frac{1}{8}$ inch, and at the other end it is looped for pressing pus out from acne pustulosa. With this instrument the meatus folliculorum were dilated, and the comedone tube again succeeded. After three weeks, the face was greatly improved, and the skin had assumed an almost normal appearance.

CASE II.—Is that of a married lady, æt. 26. The patient has suffered from acne rosacea, and a few comedones. She blushes very readily, the rosacea becoming more apparent than ever. She suffers greatly from constipation, and is of a nervous temperament. I advised her the same gruel and steam treatment as in the previous case, and at night time, to apply a paste containing sulpho-ichthyolate of ammonium (ichthyol lessens cutaneous hyperæmia, and increases cornification—in other words, hardens the cuticle), sulphur and calamine lotion during the day. Internally, ergot and cascara sagrada mixture was taken. As the bowels continued obstinate, I advised her, before rising in the morning, to pass an india-rubber ball containing hot water, along the course of the colon, from right to left, for three or four minutes, to increase the peristalsis of the large intestine ; and at the same time, to bring her thoughts more clearly to bear upon the necessity of a morning's use of the commode—an artifice, I have seen tried successfully at St. Mary's Hospital, London. I incised the papules of acne rosacea, allowing them to bleed freely, bathing with warm boracic lotion, and after drying, applied to the papules, strips of Unna's salicylic et creosote plaster muslin, 20 x 40. These plaster muslins consist of very thin sheets of gutta-percha, pressed upon undressed muslin, coated with an adhesive substance, the oleate of alumina, containing varying quantities of salicylic acid and creosote, to lessen the pain. She had two moles, but refused to have them treated ; had she consented, the treatment would have been, epilation and electrolysis, destroying the hair papillæ, and at the same time, attacking the papillomatous growth.

CASE III.—Is that of a young man, æt. 17, clerk, G.P.O. Family history phthisical, suffers from general ill-health, and disinclination for work. The skin of his face had been greatly disordered for the past eighteen months. Acne vulgaris, acne indurata, acne pustulosa, very numerous comedones, and a coarse greasy skin, were all present in his case. The cheeks and upper lips were covered with lanugo hairs. I advised him to wash with gruel, to steam, rub with a towel, and to apply ointment and

lotion, as ordered in the first case ; but this treatment proved too irritating. I then substituted for the ointment, a jelly called zinc salicylic glycerine jelly ; this preparation, kept in a tin, soon melts when the tin is put into a vessel containing water at 180° F., and may then be painted upon the affected part, and thin layers of absorbent cotton-wool pressed upon it. After washing off the jelly in the morning, I ordered a lotion containing liquor carbonis detergens, to be used. The patient stood this treatment much better. Internally, two Bland's pills night and morning, and a dessertspoonful of cod liver oil, in a glass of warm milk, was to be taken at bedtime. The acne pustulosa were operated upon with Vidal's acne lancet, some of them being pricked, and the matter pressed out with the instrument I previously mentioned. The pustules disappeared gradually, the skin softened, and the patient's appearance was very much improved. But as he was in a very low state of health, I advised him to take a trip into the country. I had him shaved twice a week, in order to induce the growth of the hair, and stimulate the hair papillæ—this increase of function having a beneficial effect in such cases ; in fact, acne has been described as a faulty condition of complementary nutrition.

Mr. SYME congratulated Dr. Lawrence on his results. The profession would welcome any treatment that would be successful in these cases, which were apt to be rather an *opprobrium medicinæ*. He could corroborate the statement, that these cases were of less frequent occurrence here, than in Europe. He had sometimes found oleate of iron useful ; the main thing was to empty the comedones.

The PRESIDENT said it was satisfactory to have a paper on skin diseases. He found that most patients had a great objection to greasy applications ; and he had used with benefit, a lotion of hydrarg. perchlor. and rosewater, say five or ten grains to the ounce, according to the irritability of the skin, dabbed on the face in the morning, and allowed to dry on.

EXHIBITS.

Mr. SYME exhibited the following :—

(1) *The Sac of a Hydrocele of the Tunica Vaginalis.*

The patient had a very large hydrocele, which always refilled very rapidly after tapping. It extended to just within the external abdominal ring, and appeared to be one of those forms in

which the processus vaginalis had not been obliterated in the usual manner, but remains patent up to the ring. It was injected with pure carbolic acid, and for some months appeared to be radically cured. It recurred however, and as the patient was very anxious for a radical cure, Mr. Syme dissected out the sac entire. It was then found that the part extending up to the ring, was a diverticulum from the original sac, which had been formed in the normal manner. The effect of the carbolic acid was seen in a sort of tanning and brownish discolouration of the tunica, and at the bottom of the sac was an oval mass of fibrin and blood clot, about one inch in length. No adhesions existed anywhere. The wound healed by first intention, and the patient made an excellent recovery, and is able to work as a shearer.

(2) *A Loose Body growing from the Wall of the Bursa Patella.*

The patient from whom the specimen was removed, was injured about three months ago by some bags of chaff falling on his legs. On admission to the hospital, his left ankle was found to be sprained, and he had acute inflammation of the right prepatellar bursa. This subsided in about three weeks, and he was discharged. The bursa, however, remained thickened and swollen, and after attempting to use the limb, filled with fluid. It was tapped, and pressure applied. As soon as he began to use it, the swelling reappeared, and it was always painful. About five weeks ago, he noticed a pea-like body under the skin. Mr. Syme dissected out the bursa, and found this to be a loose body, about the size of a small pea, with a perfectly smooth surface, and attached by a pedicle to the anterior surface of the lining of the bursa. Across the bursal cavity were strong organised bands. The patient made an uninterrupted recovery, and has now no pain or inconvenience in the knee.

Diphtheria of a very malignant type has broken out at Doncaster and Templestowe, where several fatal cases have occurred. A fatal case occurred last week at Deep Creek, about six miles from Doncaster, and another at Templestowe. No cause can be assigned for the outbreak of the disease, as the health officer for the district has reported to the Bulleen Council that, at the places where diphtheria has made its appearance, the sanitary conditions were all that could be desired, and the drainage was good. Dr. McCarthy, the health officer of Footscray, attributes the great prevalence of diphtheria in that district to the gross neglect of sanitary precautions by residents, and especially to accumulations of rain water about premises, from inefficient plumbing. During the last month, five deaths per week had occurred from diphtheria in Footscray.

Hospital Reports.

MELBOURNE HOSPITAL.

Case of Acute Epiphysitis of Humerus—Recovery, with good Movement.

Under the care of Mr. E. M. JAMES.

Reported by Mr. J. F. RUDALL, M.B., B.S., House Surgeon.

F. L., æt. 16, a carter, was admitted into Ward 1 of the Melbourne Hospital, on June 23, 1889. He stated that he had been ill for about three weeks, when he was seized with severe pain in the right shoulder. This he attributed to a twist of the arm which he received shortly before. Four days after the commencement of the pain the shoulder began to swell, and he found himself unable to use the right arm.

When admitted he was a well-developed, well-nourished boy; but he was very weak, and his expression was indicative of great suffering. His temperature was a little over 100°. The upper part of the right arm was greatly swollen, especially at its outer part; it was also very tender, and fluctuation was very distinct. Any movement of the arm caused great pain.

On the following day, an incision was made on the outer side of the arm, and a large quantity of pus evacuated. The abscess cavity was washed out with boric acid lotion, and the wound was dressed with iodoform and dry perchloride gauze. As there was still some bagging of pus, an incision was made on June 27 in the front of the arm. The patient's general condition continued to be unsatisfactory. He suffered greatly from pain, which was relieved by morphia; the discharge was still very profuse. Accordingly, on July 1, chloroform was administered, and Mr. James made an incision about four inches long on the outer side of the arm, commencing opposite the shoulder joint. Through this the head of the bone could be felt in the joint, the capsule of which was intact; but the upper part of the humerus, for a distance of about four inches downwards from the epiphysial line, was completely bare of periosteum, and necrosed. This necrosed bone was removed; the periosteum, which was much thickened, being as far as possible left behind. All dead and ulcerating tissues were scraped away with a Volkman's spoon. Drain tubes were

inserted, and the wound was closed with silver wire and horse-hair sutures, and dressed with iodoform and perchloride of mercury gauze. The arm was then placed on a rectangular splint, reaching well into the axilla, and the shoulder was immobilised by a cap of perforated zinc. For a fortnight the temperature continued to rise, sometimes to 103° at night. The wound was syringed daily with boric acid lotion, and dressed with iodoform and gauze. After a fortnight the temperature remained normal, the discharge rapidly diminished, the periosteum threw out new bone, and the patient gradually became able to move his arm. On August 10th, the patient was discharged with fair union between the head of the bone and the shaft, and a limited power of movement at the shoulder joint, which latter has markedly increased since.

Australian Medical Journal.

OCTOBER 15TH, 1889.

MEDICO-LEGAL EXPERTS.

Under existing arrangements, when a post-mortem examination of a body is ordered by a coroner, the services of the nearest medical practitioner are usually obtained. Such a system is far from satisfactory. The gentleman employed may be a very excellent practitioner, and yet make very serious mistakes, simply from want of training and experience in this special department. Being unaccustomed to making such examinations, he is apt to perform the duty imperfectly, or to misinterpret the facts. In some cases, he is further hampered by the inconvenience of his surroundings, the examination being made in the house where the death occurred. Thus, a Chinaman is found dead in a narrow, fixed bunk that occupies nearly the half of a little cabin of a room, about 8 ft. x 6 ft. The medical man instructed to make the post-mortem, when he has discovered the place, probably finds his entrance opposed by a number of excited Chinese neighbours; when he has forced an

entrance, he will be left absolutely alone in the dimly-lighted room. Why in such cases, could not the body be removed to the morgue? The medical man could easily take note of the position of the body and its surroundings before it is removed; or better still, in suspicious cases the room might be photographed. This, however, is only a detail; the important question is—Why should not men who have had some experience and training in these investigations be appointed by the Government, and paid a regular and sufficient salary, to act as medico-legal experts, and make all post-mortem examinations for coroners. The general practitioner would be only too glad to be relieved of a duty which, if he is a conscientious man, must interfere with his practice, although it is not an unheard of thing for a man to go straight from a post-mortem to attend a confinement.

The most important reason for such appointments, however, is the safety of the general public, and the assurance that crime would not be so likely to escape detection; or on the other hand, accidental deaths to be regarded as due to foul means. The proving of the innocence or guilt of an individual charged with murder, may depend almost entirely on the care with which the post-mortem is made, and the interpretation that a skilled observer may put on his observations of fact. In the recent Ringwood murder case, the first statement of the examination of the body made by Dr. Showman, and his interpretation of the circumstances, were absolutely incompatible with the theory of accidental injury. The examination made by Professor Allen, under necessarily disadvantageous circumstances, showed that the conditions present were compatible with the statement of the prisoner; though at the same time, not incompatible with the supposition that the prisoner discharged the gun with intent to kill his companion. In this case, Dr. Showman candidly admitted that his first examination had been imperfect, and his interpretation erroneous. Every man, however, is not so ready to confess to a mistake; and as regards the interpretation of indisputable facts, conflict of opinion may easily arise, and more especially when witnesses are not experts. The extraordinary conflict of opinion in

the Maybrick case, has lowered the medical profession very much in the estimation of the English public ; but it would not have so easily arisen, had the first examination and opinion on the case been given by an expert in the receipt of a regular salary.

If appointments, such as have been suggested, are not made, it is at least very desirable that all post-mortems should be made at the morgue, and that students should there receive some practical instruction, so that our University graduates may not, as at present, be called upon to make post-mortem examinations for coroner's inquests on, say a case of supposed drowning, and have never before seen a similar case. It must be remembered that all the coroners in the colony are not, like the City coroner, medical men, and able to detect discrepancies in medical evidence. As matters stand at present, it is not at all impossible that crime may be undetected, or justice miscarry, owing to the defective knowledge and experience of those who are called upon to make post-mortem examinations.

MR. BUTTERS AND THE RESIDENT STAFF OF THE MELBOURNE HOSPITAL

At a recent meeting of the Committee of Management of the Melbourne Hospital, Mr. Butters made a very serious statement with regard to the Resident Staff of that Institution. He said, that an instance had come under his notice, where a patient died, owing to the unskilful treatment which he received at the hands of one of the Resident Surgeons ; and further, that he was aware that occurrences of the same kind had taken place more than once. A charge of this kind cannot be permitted to pass unchallenged, and the Committee ought to thoroughly investigate the matter. As far as can be ascertained, the case referred to was one of retention of urine, in which attempts at catheterism outside the Hospital had failed. The House Surgeon also failed, and instead of

persisting in his attempts to pass a catheter, very properly sent for the Honorary Surgeon, who, however, failed to attend. The resident then aspirated the bladder above the pubes. The patient eventually died, having in the meantime been treated by the Honorary Surgeon. If these be the real facts, of course Mr. Butters' charge is groundless; but Mr. Butters ought himself to have ascertained all the facts, and laid them before the Committee, and not made public a vague charge in the manner he did. The members of the Committee of Management may very properly see that the members of the Staff do not neglect their duty, or misconduct themselves; they may make inquiry into cases of alleged malpractice, but no layman, whether a Committeeman or not, can possibly be competent to criticise the manner in which patients are treated, or the skill of an operator in any individual case. Every surgeon knows the difficulties attending cases of retention from old stricture, and the probable condition of the kidneys in such cases. It might appear very dreadful to Mr. Butters, to see a patient with blood escaping from the urethra, and an aspirating needle stuck through the abdominal wall, and when the patient subsequently died, Mr. Butters might ignorantly imagine that this treatment had caused his death; but before publicly proclaiming such an opinion, he ought to have made inquiry from competent authorities. Had he done so, he would have learned that, in all probability, the patient died not because of, but in spite of, treatment. Unfortunately, it will never be known for certain what the exact cause of death was, because a post-mortem examination was not made—and it would be interesting to know, why it was not made. Finally, the contemptuous manner in which Mr. Butters referred to the Resident Staff, calls for very severe rebuke. It is difficult to understand how a Hospital can be efficiently managed, when members of its Committee of Management are so ignorant of the status of their own officers, and of the respect due to them.

Reviews.

Gynæcological Electro-Therapeutics: By Horatio R. Bigelow, M.D., with an introduction by Dr. Georges Apostoli. London: H. K. Lewis, 1889.

Dr. Bigelow is fortunate in obtaining an introduction to his book by Apostoli. The disciple issues his work under the authority of the master, and the master's hand is visible throughout the pages. Naturally, the most interesting part of this little work of less than two hundred pages, is that issuing directly from Apostoli. The introduction gives, in a succinct form, the aims and scope of the method of uterine electro-therapeutics, now so well associated with the name of Apostoli.

His claim, that his method is the conservative gynæcology of the future, is certainly not undisputed by British gynæcologists of to-day. He stands on surer ground when he points to his work of rendering the application of electricity in measured dosage with more exact localisation, and in altogether a more scientific manner than has hitherto obtained. He briefly passes under review the chief "attributes and modulations which should be known to the doctor, and then describes the chief gynæcological diseases for which electricity should be used."

The induced, or Faradic current, is stated to be "essentially an excitator of muscular action and of the nervous system, both sensitive and motor, applied to organic tissue." Attention is directed to the modifications produced by a short thick, or a long fine, wire—the former is called the current of quantity, the latter the current of tension. For example, the induced current applied to the skin will be more painful if passed through a long fine wire, than when generated by a short thick one. Thus, if muscular action require excitation, a current of quantity is called for; on the other hand, the relief of pain is best obtained by a current of tension.

For pain, Apostoli has "for a long time made use of bi-polar Faradisation instead of mono-polar, in order to avoid all action upon the skin, and to make the application more simple, easier, and more tolerable, thus enhancing the efficacy by being master of the intensity."

The galvanic current he claims by careful experiment to have proved to be "powerfully antiseptic, and that it sterilises and

attenuates pathogenic microbial cultures." That there is a different caustic action at each pole, and that the "galvanic current sets up changes of nutrition which may or may not be retrogressive, according to the dose used, and which results in a trophic action that tends to the involution of certain pathological processes. With regard to galvano cauterisation to the endometrium, it is claimed that it is easy of application, requiring little or no skill as a gynaecologist; rarely is anaesthesia called for, and is less brutal than *raclage*, since the doses are progressive and not instantaneous. The operation is not contra-indicated by any acute inflammatory state, and is an absolutely harmless cauterisation, if aseptic precautions are strictly enforced.

But it is when the author comes to treat of uterine fibromas and salpingo-ovaritis, that conservative gynaecology is seen at its best. At present, only five per cent. of such cases require the assistance of the laparotomist, the remaining ninety-five being absolutely amenable to electricity. Certainly, no claim is made for an "unvarying radical cure of fibromas," such is the exception; and the sole ambition of electro-therapy, is the "symptomatic cure of the patients, and the parallel, but limited, retrogression of the fibromas." The causes of failure are stated to be, on the side of the operation, due to "inexperience in gynaecology, want of operative dexterity, and complete ignorance of physical laws."

This is rather a heavy indictment to bring in view of what was stated in a preceding paragraph, regarding galvano-cauterisation requiring "little or no skill as a gynaecologist." Failure may be due also to timidity, or too great boldness, regarding the question of dosage, or the *séances* may be too frequent or too long; also the localisation may be insufficient or incomplete.

Again, the nature of the fibroma or its situation, may adversely affect the treatment. Similarly good results are claimed for the treatment of peri-uterine inflammation—Faradisation, galvanisation, or chemical intra-uterine galvano-caustic, and vaginal galvano-puncture, are the methods advocated, the last more especially. Pyo-salpingitis is only excepted from this treatment, from the fear that it may be intensified. The method may be one of choice or necessity—the former when intra-uterine galvano-caustic applications fail to relieve; the necessity arises when "a fluctuating tumour presses into the vagina and demands rapid evacuation, by creating an antiseptic vaginal drainage."

Apostoli sums up his experience in the treatment of salpingo-ovaritis, thus:—"Every case of salpingo-ovaritis may generally, or very often find appropriate treatment in electricity, which should be the leading remedy of choice in conservatism. In the catarrhal forms, it is sovereign, only calmative in tubercular forms, and of great service in certain cases of purulent salpingo-ovaritis."

Notwithstanding the brilliant statistics Apostoli adduces, the fact, that he claims the adhesion of Dr. Thomas Keith, "a man illustrious for his surgical ability and scientific accuracy," and the apparent simplicity of his methods, it remains, that British gynaecologists at all events, have not as yet accepted his methods as proved. Although, it is now between four and five years since Apostoli threw open to the scientific world the results of his experience, it is perhaps not too much to say, that gynaecological electro-therapeutics stand upon much the same plane as electro-therapeutics in general medicine.

The general practitioner who indulges in expensive apparatus, and looks for a panacea to all uterine ills, will be doomed to disappointment. On the other hand, the specialist will feel safer by trusting to more radical methods in which he is expert, than practising tedious procedures, with only, at best, a symptomatic good.

Dr. Bigelow begins his portion of the work, by a short succinct account of the laws of electricity, passing on to the description of the different cells in use for medical batteries. The mechanism of the various kinds of collectors are well described; the galvanometer explained, and of course, its use insisted on, seeing that the whole system of Apostoli depends on an accurate dosage measurement. Dr. Bigelow does not advocate a rheostat, now that the present means of coupling are so complete, as expense is only increased thereby.

The paper read by Dr. Apostoli before the British Medical Association, at Dublin in 1887, is reproduced *in extenso*. In it, the Apostoli method is given in detail in the words of the master, and accordingly, has a corresponding value. The statistics from his clinique and private practice give 5201 operations on 403 patients, who went through the treatment more or less systematically. Two deaths occurred—one from a mistake in diagnosis in overlooking a suppurating ovarian cyst, which produced a peritonitis; the other was due to too deep a galvanopuncture,

causing intra-peritoneal gangrene, for which the abdomen was not opened.

The chapter on metritis and endometritis is from a translation by Laphorn Smith of Apostoli's memoirs on this subject. Here he points out that the work done by Tripier in Faradisation failed, because its dosage was wanting; it was difficult to localise, and it treated the mucous membrane, but was wanting in direct action upon the parenchyma. The book as a whole is a readable exposition of Apostoli's practice, and will prove invaluable to those desirous of testing for themselves the methods of the French master.

G. R. A.

Report of the First Meeting of the Australian Association for the Advancement of Science. Edited by A. Liversidge, M.A., F.R.S., and R. Etheridge, Jun. Sydney, 1889.

This large and handsome volume speaks well for Australian science, and will perhaps come as a revelation to some in older lands, who are even yet apt to regard Australia as a land of semi-barbarians, devoted solely to pastoral and agricultural pursuits; and where science, literature, and art, are almost unknown. Even those who are acquainted with the real state of affairs, will be surprised at the number and excellence of the papers collected in this volume. The formation and organization in Australia of a Science Association, on the lines of the British Association, was no light undertaking; and those gentlemen in Sydney who originated the idea, and carried it to such a successful issue, deserve our warmest thanks and heartiest congratulations. It remains for us in Melbourne to carry on the good work, and endeavour to make the next meeting, to be held here next January, even more successful. Professor Anderson Stuart, in his address at the Medical Congress, reminded us that "the physician must be a physicist," and the medical profession above all others, ought to be first in promoting the advancement of science. It is to be hoped, therefore, that the members of the profession in Victoria, will give a hearty support to the next meeting, by enrolling themselves as members, and by contributing papers. Turning now to the volume itself, it would be impossible to criticise papers in detail. We note that ninety papers were contributed, and ten sectional addresses delivered. Many of the

papers appear in these transactions by title only ; those that are printed contain the results of much original work and thought in all branches of science. Most work seems to have been done in the section of Biology, and least in that of Literature and Fine Arts. In the section of Sanitary Science, a number of very interesting papers were read on such subjects as :—"The Classification of Persons who have been Exposed to the Infection of Small-pox, so as to show the Relation between Incidence and Disease upon Them," by Dr. Ashburton Thompson ; "Theatre Hygiene," by W. E. Roth ; "The Sanitary Condition of Sydney," by J. M. Smail ; "Sanitary Sewerage," by J. B. Henson. A paper on the Deep Drainage of Adelaide, by Dr. A. Campbell, is included in the section on Architecture and Engineering, but would surely have belonged more appropriately to Sanitary Science. A number of plates and plans accompany the book, and the whole work is one which reflects the greatest credit on its Editors, and upon which the promoters of the Association deserve sincere congratulation.

G. A. S.

Extracts from the Medical Journals.

The Channel of Tuberculous Infection, by Dr. Cornet, of Koch's Hygienic Institute.—The knowledge that infection in cases of pulmonary phthisis took place generally through particles of dried sputum reaching the lungs, was important from a prophylactic point of view as the speaker pointed out ; and if we could determine the point of entry of the virus in glandular tubercle also, our aim would be more intelligent and precise. The speaker's attention was first directed to the cervical submaxillary and occipital regions. He showed some guinea pigs into whose conjunctival sac some sputum containing tubercle bacilli had been placed. No injury of the sac took place. Notwithstanding this, the bacilli grew, penetrated the tissues, and set up swelling and hyperplasia of the conjunctiva. In all the animals, caseation and softening subsequently took place in the neighbouring glands. The side on which the inoculation took place, showed the most extensive changes. In two other

animals, the nasal mucous membrane was painted by means of a pigeon's feather, with bacillary sputum in one case, and a pure cultivation of tubercle bacilli in the other. The corresponding glands became tuberculous in both cases. In other cases, the cavity of the mouth was inoculated with sputum, or pure cultivation material, and all the corresponding glands became tuberculous. In another guinea pig, infective material was introduced into the ear, and the auricular glands became subsequently caseous. In still another animal, the skin over the nose was shaved clean and sputum rubbed in, when later on a serpiginous ulceration covered with a thick scab reminded one of lupus, was observed; the cervical glands became much enlarged. Another animal was scratched on both cheeks with a finger-nail dipped into tuberculous sputum, and the ulceration covered with scab that followed, spread and became confluent. Another animal was rubbed, but without abrading the surface, with a wash leather that had been dipped into bacillary sputum; after some weeks it was killed, when the corresponding lymph glands were found enlarged. Other animals again were infected from the vagina, penis, toes, &c. He concluded that tubercle bacilli could penetrate into the system without causing distinguishable injury at the point of entry. The nearest lying glands became tuberculous, and illness developed resembling scrofula as it was often seen, and without doubt, scrofula depended on a tuberculous infection from without. This was the less remarkable, when we remembered how incautiously we treated phthisical sputum, and how frequently children made a way for the entrance of disease, by putting every possible object within their reach, covered with tuberculous dust it might be, into their mouths, up their noses, or into their ears.—*Medical Press*, June 12, 1889.

Roux and Yersin on Experimental Diphtheritic Paralysis.—The authors introduced living cultures and filtered cultures of the bacillus of diphtheria by intravenous, intrapharyngeal, or intratracheal routes, into the system of healthy animals. They find, that it is principally in those animals which do not succumb too quickly to the intoxication that paralytic symptoms show themselves. In a pigeon, for instance, paralysis commenced three weeks after inoculation, when the animal, free from false membranes, appeared completely recovered. The functional impotence of the feet and wings was almost complete, and death supervened two days after the supervention of these symptoms,

the nervous system on autopsy showing no lesions which would explain the symptoms. In the rabbit, paralysis commenced generally in the hind legs, and in rapidly progressive cases invaded in two or three days the whole body. In some cases there was paralysis of muscles of the neck, with inability to raise the head; in others there was paralysis of the muscles of the larynx with hoarseness. In some cases the respiration was diaphragmatic and jerky, any exertion bringing on oppression and asphyxia. Sudden death, without convulsions, was sometimes seen.—*La Tribune Méd.*, March 7, 1889.

Surgery of the Spine.—At the annual meeting of the American Medical Association in June, the surgery of the spine was exhaustively dealt with by Drs. J. William White and N. P. Dandridge, several illustrative cases being detailed. Dr. White considers that "the operative surgery of the spine, as regards traumatism, caries, and neoplasms, may fairly be said to have a rapidly widening field, and to deserve more serious and careful consideration by practical surgeons than it has received for years." Resection of portions of vertebræ in fractures should be recognised as an eminently proper operation, and, in suitable cases, altogether warranted by the facts in our possession. The cause of paralysis in Pott's disease is in many instances an extra-medullary tissue, assuming the density and proportion of a neoplasm, and frequently removable by operation. Every case of focal spinal lesion, thought to depend on a tumour, and not distinctly a malignant and generalised disease, should be regarded as amenable to operative interference. The method of extension, as recently revived, is well worthy of preliminary trial in the first two classes, and in obscure cases, thought to belong to the third class. It has not yet been tried in a sufficiently large number of cases to establish its exact limitation, but it is unquestionably a therapeutic measure of vast importance in spinal injury and disease. Dr. Dandridge, on the other hand, reminds us that, in Pott's disease, paralytic symptoms often disappear, even after long continuance. In one case recorded, complete paraplegia, lasting more than three years and a half, was finally relieved. The analogy of Horsley's and Macewen's cases must be applied with caution to fracture, where the damage to the cord is often immediate, and not due to continued pressure by displaced bone. In fracture of the spine, immediate operation is not indicated, as a considerable proportion of cases recover

under less dangerous methods of treatment, such as the plaster jacket applied by the hammock extension method of Davy. The continuance of symptoms is an indication for operation, as it has been conclusively shown, that the relief of symptoms, even after long continuance, may be followed by complete restoration. He concludes that—(1) In fractures of the cervical vertebræ, there is indicated immediate reduction of any displacement by extension and manipulation under an anæsthetic, followed by continuous extension and immobilisation; (2) In all fractures of the lumbar or dorsal spine, involving the bodies of the arches, reduction is effected with or without the plaster jacket by the hammock suspension, preceded, if there is evident displacement, by extension under an anæsthetic; (3) When symptoms indicating injury of the cord persist without improvement, resection is indicated; (4) Immediate operation would be indicated when there is marked depression of the arches, with symptoms of paralysis; (5) Long continuance of the symptoms is not in itself a contra-indication to operation; (6) We have, in suspension, the means of alleviating some of the sequelæ of fracture of the spine.—*New York Medical Record*, June 29 and July 6, 1889.

University Intelligence.

At a meeting of the Council held on September 16, a letter was received from the Medical Board of Victoria, inviting the Council to join with it in a deputation to wait on the Attorney-General, and urge him to introduce into Parliament a bill to amend the Medical Practitioners Statute, so as to admit of action being taken by the Imperial Government to have the medical degrees of the Melbourne University recognised by the General Council of Medical Education and Registration of the United Kingdom.

The Chancellor, Mr. Ellery, and the members of the medical profession on the Council, were asked to join the deputation.

Mr. MacFarland moved an amendment of the University Regulations, so that at examinations apart from that for Matriculation, candidates' papers should be distinguished by name instead of number. The present rule was unnecessary, and had led to many mistakes.

On the suggestion of Mr. Higgins, the matter was referred to the Professorial Board for an opinion. It was also decided to get advice from the Board of Examiners, as to the desirability of instituting a change in regard to the Matriculation Examination.

The Professorial Board recommended that laboratory work in chemistry and biology in the affiliated Colleges, should not be recognised in connection with the University.

On September 18, the Chancellor of the University of Melbourne (Dr. Brownless), Dr. Bride, and Mr. R. L. J. Ellery, members of the Council of the University, waited on the Treasurer, to bring under his notice the necessity for Government grants to extend the University Buildings, and to provide additional lectureships.

The Chancellor said that there was an urgent necessity for increasing the accommodation at the University. The want of class-rooms was greatly felt at the present time, and it was requisite that provision should be made for additional classes which were to be conducted next Session. The sum of £20,000 was required for buildings, and £1750 for new lectureships as follows:—Mechanical engineering, £250; architect, £250; hydraulic engineer, £250, and professor of pathology, £1000. A sum of £1500 was also required as salary for the office of Provost, which it was proposed to create.

Dr. Bride said that the University was growing at such a rate, that the authorities were crippled on every side for want of funds. The engineering school had grown, and the medical school had become very large, so that additional teaching power and accommodation were greatly needed.

Mr. Gillies said that the requests should have been made earlier. He did not think £20,000 could be spent on buildings this year. All he could say was, that he would see what could be done in the matter.

The October Session of the Senate, held its first meeting on October 1. Dr. Madden moved, that the report of the Select Committee on the Statute of the Provost, be proceeded with before any other business. After some discussion, the motion was carried. Dr. Madden then moved, "that the Statute of the Provost lie on the table, and that the report of the Select Committee be approved by the Senate, and be forwarded, with its appendix, to the Council."

The report is as follows:—The Select Committee appointed by the Senate, to consider and report on the proposed Statute "of the Provost," report that they have held three meetings, and after

full consideration of the subject, your Committee recommend to the Senate, that the proposed Statute be not adopted, but that the Senate request the Council to take the necessary steps to have an Act of Parliament passed during the present Session, giving the University power to create a new paid officer, to be mainly responsible for the administrative and professional management of the University; such officer, to be ex-officio a member of the Council and Vice-Chancellor, and to be appointed by the election of the Council and five professors, such five professors to be appointed for the purpose of such election, as occasion may require, by the professors of the University—provided there be no members of the Professorial Staff members of the Council; and if there be then any such members of the Professorial Staff, who are members of the Council, the Professorial Staff to elect so many professors only, as with the number of professors who are then also members of the Council, shall make up five; the tenure of such officer to be during good behaviour and capacity, but the Council to be sole judge of such good behaviour or capacity.

In the event of Parliament passing an Act which will allow of such officer being appointed, your Committee recommend that the Council pass a Statute, to be approved by the Senate, defining the duties of the new office, such Statute to be entitled "of the Vice-Chancellor," and to be in the form, and contain the provisions set forth in the appendix to this report.

Dr. Madden stated, that resolutions which formed the report of the Select Committee, practically varied the Statute of the Provost only on two or three points. Instead of a Provost, the report recommended that there should be a paid Vice-Chancellor, and that he should be elected by the Council and a certain number of the professors, chosen by the whole Professorial Board. The new officer would be the Chief Executive Officer of the University. After a long and animated discussion, the debate was adjourned until the 3rd inst., when Dr. Madden's motion was carried.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee of the Melbourne Hospital, held on September 17th, a letter was received from Dr. R. A. Stirling, complaining of the want of accommodation in the casualty ward, which it was decided to refer to the Building Committee for report. The statement made by Mr. Derbin Willder at the previous meeting of the Committee, that the Melbourne Hospital would not receive any monetary benefit from the Increased Hospital Accommodation Fund now being raised, came under discussion. On the motion of Mr. B. Rappiport, seconded by Mr. J. M'Kean, it was decided that application should be made to the Increased Hospital Accommodation Committee, asking that a share of the moneys now being raised should be devoted to providing better accommodation for outdoor patients in the Melbourne Hospital. It was also decided that a letter of condolence should be sent to Mrs. Ormond, widow of the late Mr. Francis Ormond, M.L.C.

At the ordinary meeting of the Committee of the Melbourne Hospital, held on the 1st inst., Mr. Butters, M.L.C., moved the adoption of the recommendation by a Sub-committee, that a medical superintendent should be appointed at a salary of £500 a year; and that two registrars should be appointed—one for medical, and one for surgical cases—at a salary of £100 a year each. He stated, that it was absolutely necessary that a medical superintendent of high standing and attainments should be appointed to receive patients, and if necessary, treat them before the arrival of an honorary medical officer. An instance had come under his notice, where a patient died owing to the unskilful treatment which he received from the young and inexperienced medical men who took charge of his case, and he was aware that occurrences of the same unfortunate nature had taken place more than once. Mr. Rappiport opposed the resolution, on the ground that the salary was excessive, and that a sufficiently capable medical officer could be got for £400 a year, but the motion was carried.

ALFRED HOSPITAL.

The Committee of Management of the Alfred Hospital met on 4th October. The Superintendent reported the state of the house to be as follows:—Number of inmates, 27th ult., 113; admitted since, 16; discharged, 14; died, 2; out-patients, 183; casualties, 7; total for the week, 303; pay wards, 12. There were no cases of typhoid admitted during the week, the number of patients under treatment being 8.

INCREASED HOSPITAL ACCOMMODATION.

A meeting of the Executive Committee of the Increased Hospital Accommodation Fund was held at the Town Hall, on 30th September, Sir Benjamin Benjamin occupied the chair. A letter was received from Mr. Kent, of the Railway Department, forwarding a further cheque for £170, and intimating that the *employés* hoped to bring up the total amount of their subscriptions to £500. A letter was received from the Melbourne Hospital asking for a share of the fund to assist the Board of Management in carrying out some much-needed alterations in the out-patient accommodation at the institution. It was pointed out that, from the inception of the fund, it had been decided that none of the money should go to the Melbourne Hospital, and under these circumstances, the Committee were compelled to reject the application. Mr. Illingworth stated, that so soon as the £3000 allotted to the Homœopathic Hospital was available, a gentleman, who did not wish his name made public, had promised to erect a new wing at a cost of £10,000. This wing would be capable of containing 71 beds, and the £3000 would be expended in the necessary fittings, and in providing communication with the portion of the building already in existence. The Honorary Treasurer submitted a statement of accounts, which showed that a sum of £3498 2s. 6d. had already been collected, while promises to the amount of £437 0s. 6d. were still due. This sum will enable the Committee to claim the Government grant of £10,000; but a further sum of £1500 is still necessary to complete the

proposals adopted by the Committee at a recent meeting, and it was resolved that special efforts should be made to obtain this sum. The Treasurer was instructed to apply for the amount of the Government grant, and the meeting then closed.

When the will of the late Mr. J. B. Watson, the Sandhurst quartz-reef millionaire, was proved, surprise was expressed that no bequests to the local charities were provided for in the will. It has now transpired that Mr. Watson left some valuable securities on a friend's hands, with verbal instructions to provide an income for Mrs. Watson out of these, and that on that lady's death, the sum of £7000 should be paid for the erection of a children's ward at the Bendigo Hospital. This information has just become public, and with it the announcement, that the bequest is to be disputed.

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and suburbs for August 1889, shows that the births of 1478 children, viz., 744 boys and 734 girls, were registered in greater Melbourne during the month of August. In the month of July, 1581 births were registered, or 103 more than in the month under review. The births were 433 above the average of the month during the previous ten years, but only 81 above that average, if allowance be made for the increase of population. The deaths registered in August numbered 723, viz., 394 of males and 329 of females; the births thus exceeded the deaths by 755, or 96 per cent. The deaths were fewer than those in July by 128, but exceeded the average of August during the previous ten years by 197. If, however, allowance be made for the increase of population, they will be found to have exceeded that average by

only 20. To every 1000 of the population of the district, the proportion of births registered was 3·38, and of deaths registered 1·65. One hundred and eighteen deaths, or 16 per cent. of the whole, took place in public institutions, viz:—55 in the Melbourne Hospital, 19 in the Alfred Hospital, 4 in the Children's Hospital, 4 in the Lying-in Hospital, 12 in the Immigrants' Home, 14 in the Benevolent Asylum, 1 in the Yarra Bend Lunatic Asylum, 8 in the Metropolitan Lunatic Asylum, 1 in the Austin Hospital. The deaths of children under five years of age numbered 258, of which 138, or 54 per cent. were of males, and 120, or 46 per cent. were of females. Of those who died, 155 were under one year of age, 52 were between one and two, 19 were between two and three, 13 were between three and four, and 19 were between four and five.

CAUSES OF DEATH IN GREATER MELBOURNE, AUGUST 1889.

CAUSES OF DEATH.	NUMBER OF DEATHS. *					PROPORTIONS PER CENT.
	Males.		Females.		Total.	
	Under five years.	Over five years.	Under five years.	Over five years.		
Specific febrile or zymotic diseases	28	12	27	20	87	12·08
Parasitic diseases	..	..	..	2	2	·28
Dietic diseases	..	..	1	..	1	·14
Constitutional diseases ..	5	59	5	50	119	16·46
Developmental diseases ..	9	12	10	11	42	5·81
Local diseases	72	147	63	116	398	55·05
Violence	4	23	2	9	38	5·25
Ill-defined and not specified causes	20	8	12	1	36	4·98
All causes	138	256	120	209	723	100·00

Deaths from whooping cough numbered 19 in August, against 22 in the previous month; deaths from phthisis, 73, against 98; deaths from bronchitis, pneumonia, and congestion of the lungs, 123, against 135; cancer caused 24 deaths in both months. In addition to the deaths from diphtheria, referred to in the last column of the following table, 8 deaths were set down to diphtheritic croup in the month under review, and 16 in the previous month.

The following is a statement of the deaths set down to typhoid fever and diphtheria in each of the first eight months of the present and the two previous years :—

DEATHS FROM TYPHOID FEVER AND DIPHTHERIA, 1887 TO 1889.

(First eight months of each year.)

MONTHS.	TYPHOID FEVER.			DIPHTHERIA.		
	1887	1888	1889	1887	1888	1889
January	40	39	70	1	5	15
February	70	68	64	4	2	18
March	59	54	91	3	18	18
April	57	48	113	6	13	26
May	40	32	92	10	19	35
June	15	20	36	7	16	30
July	15	12	17	9	14	48
August	9	9	16	7	11	36
Total	305	272	499	47	93	221

Correspondence.

To the Editor of the Australian Medical Journal.

SIR,—I see by last month's Journal, page 421, that in the discussion which took place at the meeting of the Medical Society, Mr. Syme said—"All authorities agree as to the propriety of inverting the peritoneum ; but this does not seem to me to be a rational proceeding, as you thus bring uninjured surfaces into contact. In ordinary wounds, you would never think of turning the outer skin flaps towards each other to get union." I was surprised that neither Mr. Syme nor any of the subsequent speakers, seemed familiar with the celebrated experiments of Sir Spencer Wells, described in his well-known book on "Abdominal Tumours," page 52, in the 1885, or cheap edition. As the result of these experiments, he states—"When skin or mucous membrane is divided, the edges must be brought together to secure direct union. If they be inverted, union is prevented. The exact opposite holds good with serous membranes—the edges should be inverted . . . the effused lymph then makes so good a

surface, that the line of union cannot be seen." He shows that the object of the inversion is to prevent the adhesion of any of the abdominal organs to the wound. In the two autopsies mentioned by Mr. Syme, I think that probably a sufficient quantity of peritoneum was not inverted, or else there was not sufficient pressure kept up by the sutures on the inverted portions. At any rate, his experience seems opposed to that of Sir Spencer Wells, whose preparations in the College of Surgeons' Museum, had I thought settled the matter. I am afraid that Mr. Syme's idea of dissecting off the peritoneum and everting it, though it may be rational, would be likely to produce adhesion of other organs covered by peritoneum in the neighbourhood, and would scarcely be an improvement upon Spencer Wells' method, which until now, I never heard questioned.—I am, &c.

H. H. FLEMING.

Donald, Victoria.

September 30, 1889.

[In reply to Dr. Fleming, Mr. Syme desires to say that he fails to see that the statement quoted from the discussion implies ignorance of Sir Spencer Wells' experiments: As a matter of fact, Mr. Syme is familiar with both the experiments and the specimens in the College of Surgeons' Museum. It may be pointed out, however, that these experiments refer to the union of the wound in the abdominal parietes; the subject under discussion was the wound in the uterus. Further, if his remembrance of those specimens is correct, the union, where the cut edges of the peritoneum, without inversion, are in exact apposition, is perfect. Dr. Fleming's suggestion, that failure of union in the cases referred to was due to want of sufficient pressure by the sutures, is very possibly correct. It is also quite possible that, as he suggests, the eversion of the peritoneum might increase the risk of adhesion of neighbouring organs. Mr. Syme would like to explain that, as the whole success of Caesarian section depends on the rapid and firm closure of the uterine wound—and he had personally seen cases of failure of union where every precaution had apparently been taken to secure that union—he merely threw out a suggestion, which, it seemed to him, might make that union more certain in the particular cases in question. However prone inflamed serous surfaces are to unite, they will not unite unless inflamed. If our

asepticism be perfect, inflammation ought to be almost absent. Thus Simon's operation for hydatids, when performed without antiseptic precautions, always produced adhesions between the visceral and parietal layers of the peritoneum; when performed antiseptically, few or no adhesions resulted.]

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—George Alexander Webster, Melbourne, M.R.C.S. Eng. 1886, M.B. Camb. 1889; John Vere Charles Denning, Melbourne, L. et L. Mid. K.Q.C.P. Irel. 1871, L.R.C.S. Irel. 1871.

HEALTH OFFICERS.—The following appointments have been confirmed:—Shire of St. Arnaud, West Charlton District—James Joseph McEniry, L.R.C.P.; Minyip District—Charles Broom, M.R.C.S. *vice* Andrew Grant, M.B., resigned. James de Burgh Griffith, M.B., et Ch.M., to be Acting Health Officer for the port of Port Phillip, and Superintendent of the Quarantine Station at Point Nepean, during the absence of John Henry Browning, M.D., on leave.

PUBLIC VACCINATORS.—The following appointments have been made:—Hamilton—Leonard Robinson, Esq., M.D., *vice* William E. Hearn, Esq., M.B., whose resignation has been accepted; Tallygaroopna—Samuel Bailey Eadon, Esq., M.D.; Frankston—George Purcell Atkins, Esq., L.R.C.P.; Nathalia—Francis Joseph Keyes, M.D., *vice* Charles Drinkwater, M.R.C.S., deceased.

VICTORIAN MILITARY FORCES.—The following probationary appointment has been made:—Louis Beckett, to be Surgeon of Victorian Rangers Medical Staff, with the relative rank of Captain.

The report of the Central Board of Health for the year 1888–89, was laid on the table of the Assembly. Complaint is made, that the publication of the report is much delayed by the failure of some of the local bodies to present their reports in time. Many local boards had shown commendable activity during the past twelve months, in suppressing nuisances and prosecuting offenders. Of these, Fitzroy, Prahran, South Melbourne, Richmond, Collingwood, and Coburg are especially named. The state of public health since last reported, is said to have been generally favourable, with the exception of the unusual number of cases of typhoid fever and diphtheria. The total deaths from typhoid fever, were 587 (consisting of 313 males and 224 females) during 1888, but since the beginning of the present year, it has been specially prevalent, and evidently the season has been suitable for its development. The death-rate in typhoid fever has been less than the average, being 10·7 of the cases reported. It is held to be hardly possible to stamp out this disease for many years to come, but by the

adoption of proper sanitary precautions it may, year by year, be reduced to a minimum. Although the number of cases of typhoid fever has been much greater than those of diphtheria, the fatal results of the latter have been relatively greater. The proportion of deaths to cases reported is given as 30·8 per cent. The total deaths during 1888 from diphtheria were 301, 140 of which occurred in Melbourne and surrounding Cities, Towns and Boroughs. But these deaths registered as from diphtheria, are exclusive of deaths attributed to "diphtheritic croup," which are recorded under "croup." The total deaths from this last-named disease were 282. Since the commencement of this year, up to the 30th of June, 747 cases of diphtheria were reported, 249 of which were fatal. As compared with the previous years, there was in 1888 a large increase in the number of deaths from diphtheria, croup and scarlet fever; while of measles, only 30 deaths occurred, as against 78 in 1887. A slight reduction occurred in cancer, consumption, congestion of the lungs, and nervous diseases. Allowing for the increase of population, hardly any increase is recorded in deaths from typhoid up to the end of 1888, but there has been a large increase since; the cases reported up to the 30th June, being 5290, and the deaths 545. During the year 1888, 23,071 cases of successful vaccination were registered, composed of 11,722 males, and 11,349 females. The births for the same period were 34,503, being 17,617 males, and 16,886 females. The apathy of local bodies, with regard to the adulteration of food still continues. In cases where analysts have been appointed, it has evidently been a mere form. In the reports of 126 municipalities, no mention whatever is made of the subject of adulteration, nor as to any precautions, and the general carelessness which prevails with regard to the pollution of drinking water is deplored. The Yan Yean system, though not perfect, is pointed to as affording an admirable example of how water may be brought from safe sources, and protected on its way to the point of consumption. The report adds that it is much to be feared, that outside of the metropolitan area, the drinking of polluted water is the rule rather than the exception. In the larger centres of the population, the inhabitants are supplied with water, which has been contaminated with drainage from Towns and Villages, and from cultivated lands, and which not infrequently is polluted by the very people who should be most interested in maintaining its purity. In smaller places, where there is no regular supply, but where water is taken from the most convenient well, creek, or waterhole, such pollution is of frequent occurrence. The Board states, that the information at its command leads to the belief, that the following Boroughs and Townships habitually use water which is more or less impure, and consequently injurious to health, viz:—Clunes, Echuca, Horsham, Sale, Talbot, Wangaratta, Warracknabeal, Rochester, Nathalia, Omeo, Traralgon and Warragul. The continued existence of small municipalities, without means to do more than pay salaries and the current expenses, is held to be a serious bar to sanitary advancement. It is mentioned with regret, that in spite of all that has been said, the abominable condition of the suburban slaughtering places is allowed to continue, notably at South Melbourne and Port Melbourne.

The third Progress Report of the Sanitary Commission was presented to Parliament on September 24. The greater portion of the Report is taken up with the questions of drainage and sewerage. Of the schemes submitted to the Commission, those prepared by Mr. W. Thwaites and Mr. George Gordon

are deemed especially worthy of consideration ; and, assuming that a system of water carriage will be adopted, the Report points out that the questions likely to be submitted to the consulting engineer are two alternative schemes. The first scheme would consist either of a single outfall on one side of Port Phillip Bay, or a double outfall, the sewage of each district being carried to the most convenient spots, where it may be effectively dealt with. The second scheme would provide either for the collection of the whole of the sewage at pumping stations, and the raising of it to such a height that it would flow by gravitation to the place of disposal ; or, in place of this, a scheme providing for the higher levels being drained by gravitation, and the lower levels being collected at convenient places, and pumped to these higher level sewers. The Report deals at length with the several details of these schemes, and its general tenor is an advocacy of deep drainage, combined with the disposal of the sewage on a farm, similar to those near Berlin and Paris. Regret is expressed in the Report, that the consulting engineer, Mr. Mansergh, is not to remain in the colony for a longer period than eight weeks. The time is deemed wholly insufficient for the performance of the functions defined in a former Progress Report of the Commission. The lesser questions dealt with in the Report are those of milk supply, the possibilities in the way of country-killed meat, and some recommendations in connection with the Amending Health Bill now before Parliament. The Report generally urges a greater supervision over dairy farms, from which the supply of the metropolis is so largely drawn, the imposition of such laws as would prevent cows being kept in the city or suburbs, and the abolition, under by-laws, of many unsuitable city establishments which are used as centres for the distribution of milk. The Commission also commend a regulation in force in New South Wales, dealing with cases in which an epidemic is supposed to have spread through the milk supply. The paragraph dealing with country-killed meat has reference to an experiment made in sending chilled meat from Sydney to Bourke and back by rail. The chief recommendation in connection with sanitary regulation, as far as it affects the metropolitan area, is the appointment of a principal medical inspector of the highest attainments and an expert in sanitary science. It is also urged, that more stringent laws are required to deal with such offences as the sale of adulterated or unwholesome foods. In this portion of their Report, the Commission express their opinion that a great deal of the difficulty experienced in enforcing the provisions of the Health Act arises from the absurdly easy penalties so often inflicted by magistrates for offences arising under the Act. It is also urged, that power should be given to the Central Board to prosecute when the local Boards neglect their duty in that respect.

At a meeting of the Sanitary Commission, held on October 1, Mr. August de Bavay, brewer at the Victoria Brewery, submitted a statement of the methods he adopted when he found what he alleges to be the bacillus of typhoid fever in the Yan Yean water. The water was taken from a tap connected direct with the main, by an iron pipe fifty-five yards long. The tap was sterilised by a flame, and the water allowed to run three hours before it was collected in a sterilised Chamberland flask. This water was then mixed in a small flask with sterilised gravy beef. The mixture was then sown over sterilised plates, and placed in sterilised moist chambers for thirty-six hours. On two of the plates a colony, with the characteristics

of typhoid bacilli, was found. Some of the gravy beef culture was also sown in tubes of gelatine, and on potatoes. All these tests, and the appearance of the bacilli under the microscope, confirmed his impression. Mr. De Bavay thought that contamination of the water very probably occurred by means of the fire-plugs. He had several times seen sewage running into the water supply. There was a plug in front of the Victoria Brewery, the level of which was only an inch and a half above the centre of the gutter, and any time a good shower of rain fell, there were six inches of water above the plug.

On the 8th of October, Mr. De Bavay submitted a further report, in which he stated that he had examined the sediment from three filters, and found typhoid bacilli in each of them. He had also experimented on the action of lime on the typhoid bacilli, and found that the addition of 0.02 per cent. of lime prevented the growth both of the bacilli and of spores.

A deputation from the Melbourne University and the Medical Board of Victoria waited on the Attorney-General on September 24, and laid before him the necessity for alterations in the Medical Practitioners' Statute 1865. The members of the deputation were Dr. Brownless, Chancellor of the University, Mr. R. L. J. Ellery, Drs. James Robertson, Youl, Tweeddale, Jonasson, Hewlett, and Mr. E. M. James. They pointed out that they desired to strike certain words out of the 9th clause of the Act, which enacted that only natural born or naturalised subjects of Her Majesty should be entitled to be admitted to degrees here if they came from another country. That alteration was specially desired at once, as the Medical Council at home would not recognise Victorian degrees until it was done; but the medical profession and the University here also desired amendments of the Act in other directions, so that the Medical Board might be able to strike members off the rolls who were guilty of unprofessional conduct, and so that no person should be able to come to this colony and claim a diploma or degree, unless he had passed a four years' medical course in some recognised institution in another country. Mr. Wrixon promised that he would introduce a Bill this session to amend the Act, by striking out the words in the ninth clause, but said he was afraid to promise that the Act should be amended this session in the other directions mentioned, as some objections had been raised against giving the Medical Board here the power of striking names off their rolls. The deputation stated that they would be content with the amendment of the ninth clause this session, if the other amendments could not be passed, and Mr. Wrixon promised that at all events a bill should be introduced to amend the ninth clause.

The *Hampshire Chronicle* of August 10 contains a report of a lecture upon "Australia," which was delivered at Winchester by Dr. Wooldridge, of Melbourne, himself a native of Winchester. The geographical positions of the various colonies, and their respective climates, products, and capabilities were explained by the lecturer, and he sketched some of the characteristic features of Australian life in the country, and in the towns. Respecting Imperial federation, Dr. Wooldridge said that the subject had been largely discussed during the last two years, but nothing of a practical nature had yet been done, the fact being that before the colonies could federate with England or any other country, they must federate among themselves. At the present time, he added, intercolonial trade was discouraged by the adoption of

vexatious border tariffs. A vote of thanks was passed to Dr. Wooldridge for his interesting address.

A meeting of registered dentists was held in the Melbourne Coffee Palace on September 24, for the object of receiving the report of the Committee appointed at a previous meeting, and of taking steps for the formation of a Dental Association of Victoria. Dr. Springthorpe was unanimously voted to the chair. The Committee presented a synopsis of the objects of the proposed association, as follows:—(a) To support and protect the character, status, and interests of registered dentists practising in the colony of Victoria, to suppress malpractice, and to decide all questions of usage in regard to the rights and privileges of dentists. (b) To consider, originate, and promote improvements in the law relating to dentists, and to consider alterations in the law, and to oppose or support the same, and to effect improvements in the administration and practice of dentistry; for the purposes aforesaid, to petition Parliament, and to take such other steps and proceedings as may be deemed expedient. (c) To advance and encourage the study of dentistry in all its branches by the establishment and maintenance of a dental hospital and college, thereby affording the necessary educational facilities for dental students, in accordance with the regulations relating to education framed under the Dentists' Act 1887. (d) To relieve poor and necessitous persons who are or have been members of the Society, and any other dentists who may, through bodily or mental infirmity, or other misfortune, be incapacitated from carrying on business, and also the wives and families of such persons. (e) To relieve poor and necessitous widows, children, and other relations of deceased members of the Society. It was proposed by the report also, that the qualifications for membership should be, as in the British Dental Association, as follows:—(a) Every member must be a registered medical practitioner, or a registered dentist of the colony of Victoria, as regards dentists in Victoria; or as regards dentists outside this colony, possess some other qualification, to be afterwards agreed upon. (b) Every member must be of good character. (c) He must not conduct his practice by means of the exhibition of dental specimens, appliances, or apparatus in an open shop, or in a window, or in a showcase, exposed for public inspection. (d) He must not conduct his practice by means of public advertisements or circulars describing modes of practice (this is not intended to prohibit advertising name and address), or by means of the publication of a scale of professional charges. On the motion of Mr. Potts, seconded by Mr. Iliffe, the report was adopted, and the Association agreed to be formed on the lines indicated. On the motion of Mr. Horace Stevens, the clause excepting the advertising of the name and address of a dentist from the prohibition of "conducting practice by means of public advertisements," was extended, so as also to except advertising the hours of consultation from the prohibition. It was generally agreed, that advertising the hours of consultation was unobjectionable. On the motion of Mr. Horace Stevens, seconded by Mr. J. S. Tayler, it was agreed to add to the powers of the Council, a clause "to advance and encourage the study of dentistry, by holding meetings for the purpose of discussing dental subjects, and by such other means as the Council may deem advisable." The articles of association were then placed before the meeting for signature, and nearly all the gentlemen present subscribed to them. A number of letters were received from country dentists, expressing their concurrence with the objects of the

association. The following gentlemen were duly elected as the first Council:—Dr. Springthorpe, Mr. Iliffe, Mr. M'Gregor, Mr. Kernot, Mr. Potts, Mr. G. Thomson, L.D.S.; Dr. Carter, D.D.S.; Mr. Clarke, Mr. Reeve, Mr. M'Intyre, Mr. George, and Mr. Stevens.

BIRTHS.

ALDOUS.—On the 8th August, at Mannamead, Plymouth, England, the wife of Dr. G. F. Aldous of a daughter.

ANDERSON.—On the 15th September, at Eblana, Napier-street, Footscray, the wife of Dr. James Anderson of a daughter.

DAVIES.—On the 2nd October, at Benalla, the wife of Dr. T. Sydney Davies of a daughter.

SYME.—On the 8th October, at her residence, Main-street, Stawell, the wife of W. H. Syme, surgeon, of a son.

WOLFENDEN.—On the 11th October, at her residence, St. Arnaud, the wife of Dr. J. Jackson Wolfenden (prematurely) of a daughter.

MARRIAGES.

ATKINSON—SAUNDERS.—On the 25th August, at St. Augustine's, Inglewood, by the Rev. Rowland Hayward, Harry Leigh Atkinson, M.D., of Sandhurst, to Katherine Alice, eldest daughter of James Miller Saunders, of Green Hills, Inglewood.

CLINDENING—BROOKE.—On the 7th September, at St. Luke's Church, Adelaide, by the Rev. Archdeacon Farr, Frederick Talbot Driffild, youngest son of William Talbot Clindening, M.R.C.S.E., to Clara, elder daughter of the late Thomas Collier Brooke, late of Veronica, St. Kilda East.

ROBINSON—CLARKE.—On the 25th September, at the residence of the bride's parents, by the Rev. J. S. Drummond, assisted by the Rev. S. Robinson, of St. Kilda, uncle of the bridegroom, Archibald Clarke Robinson, M.D., L.M., L.R.C.S. Ed., of Jerilderie, eldest son of Professor Robinson, of Belfast, Ireland, to Edith Kathleen, third daughter of John Clarke, Emu Hill, Lintona.

THE
Australian Medical Journal

NOVEMBER 15, 1889.

Original Articles.

THE MICROSCOPICAL EXAMINATION OF THE
SPUTUM IN CANCER OF THE MEDIASTINUM
AND LUNG.

By JAMES W. BARRETT, M.D., M.S., F.R.C.S. Eng.

Assistant Surgeon to the Victorian Eye and Ear Hospital.

The disease referred to is rare, and recorded microscopical examinations of the sputum in such cases are still rarer ; consequently, some interest attaches to an examination which assisted in the formation of an accurate diagnosis.

A man of about 40 years of age had suffered for some time from an affection of the thorax, about the nature of which there had been considerable doubt. In order to obtain collateral evidence bearing on the diagnosis, which had been surrounded with difficulty, his medical attendant sent me two specimens of the sputum for detailed microscopical examination. The sputum was singularly gelatinous and viscid. When turned out of the vessel in which it was contained, it had almost the appearance of a clot ; it could be drawn out into strings over twelve inches in length.

I made repeated examinations of portions of it, unstained and stained, and submitted to examination a considerable quantity of it. The result of the examination was shortly as follows :— The sputum was made up of two elements—(1) the ordinary corpuscles seen in sputum, which were present in vast numbers ; (2) squamous epithelial cells of varied size and shape, varying from oval and round nucleated protoplasmic cells, to flattened distorted scales. Sometimes these scaly cells were found in masses adherent to one another, and once—but once only—an imperfect epithelial nest was noticeable. The epithelial cells, like the corpuscles, were also present in great numbers. There was no appearance of lung tissue, disintegrated or otherwise.

It was evident then that (since there was no disease of the mouth) there was very active proliferation proceeding in the

vicinity of the pulmonary alveoli. The squamous epithelium could not come from anywhere else ; the corpuscles might. The absence of any lung tissue led me to infer the absence of primary lung disease, and the existence of something in the mediastinum causing lung irritation and epithelial proliferation.

Thus this examination showed that the disease was not phthisis. The possibility of such changes being produced by a chronic pneumonia was not lost sight of ; but in such a case degenerate products would probably have been present, and such a disease was, I believe, quite excluded by the clinical characters of the case. The probabilities seemed to point to the existence of malignant disease of the mediastinum, causing pressure on the lungs, and I reported accordingly.

Not long after this examination the patient died, and when an autopsy was made, a mass of new growth was found occupying the posterior mediastinum. A portion of this, together with a portion of each lung which seemed to be affected, were sent to me for examination. The tumour itself was a rather slow-growing scirrhus, and in each specimen of lung was evidence of the existence of secondary (microscopic) nodules.

Thus, whilst the conclusion arrived at from the examination of the sputum as to the nature of the primary growth was correct, the inferences whereby the conclusion was reached were only partially correct, since the proliferation of epithelium must certainly be referred, at all events in part, to the actual existence in the lungs of cancer nodules ; from which is deducible the important conclusion "that cancer of the lung may cause the proliferation of sputum corpuscles, and of epithelium in vast quantities, without any signs whatever of lung disintegration."

At a meeting of the City Council held on the 21st ult., the City Surveyor recommended the adoption of a system of day removal in air-tight closed pails of the city excreta, and treating their contents in such a way as to render them innocuous, and also of absolute manurial value. In his opinion, Sir James Farmer and Sons' machines were the best for the purpose. Six dessicators should be provided, each of which could treat 15 tons per day. The estimated actual first cost of machinery, buildings, &c., was £42,850, and the annual expense of working, £11,700.

A report was also submitted on the disposal of the city refuse. For this purpose, cremation is recommended.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING

WEDNESDAY, NOVEMBER 13TH, 1889.

(Hall of the Society, 8 p.m.)

The President (Dr. BALLS-HEADLEY) was in the chair, and there was a large attendance of members.

The minutes of the preceding meeting were read and confirmed.

Three gentlemen were nominated as members.

Dr. SNOWBALL opened a discussion by reading the following paper:—

THE TREATMENT OF DIPHTHERIA.

By W. SNOWBALL, M.B., Ch. B. Melb., L.R.C.P. Ed.

In opening a discussion on diphtheria, I will commence by briefly reviewing the theories accepted at the present time as to the etiology of the disease.

The following is a summary of Oertel's views as regards the virus of diphtheria:—The nature of the virus is obscure. It acts upon cells, causing their death and disintegration, and the infected particles convey the virus to other cells. The virus causes hyaline degeneration in the tissues. The hyaline degeneration in the walls of the blood-vessels causes them to rupture, producing hæmorrhages. The unequal amount of hyaline change in different parts of the vascular apparatus may be attributed to differences in resisting power, or unequal exposure to the infected blood. Secondary inflammatory processes in the lungs, heart, liver, kidneys, and in the central and peripheral nerve tissues, must arise from the infectious property of the blood circulating in them. That bacterial organisms cause diphtheria, and that they produce that result not by their direct action, but by producing a ptomaine, which infects the system and causes the disease to be constitutional. The microbe itself is mostly confined to the surface, while the action of the virus is widespread and deep. This, vague though it be, expresses as nearly as possible all we know about the specific principle or germ of diphtheria.

Mode of Propagation.

Like the eruptive fevers, it is produced by the reception in or upon some part of the system of the pre-existing specific poison; and the source of this poison may be either from a previously

infected person, or, specially in cities, from exposure to the emanation of sewer gas, and late experiments have shown that there is a throat affection in the lower animals, notably, cats and poultry, which is quite capable of producing diphtheria in the human species.

In the present imperfect knowledge of the active factors of diphtheria, it is extremely difficult to say whether it is primarily a local or a constitutional disease. It is certain, however, that diphtheria, if not primarily constitutional, is attended very early by systemic blood poisoning—even on the first day.

Such being the pathology of the disease, it is easy to see how, apart from the mere mechanical action of the membrane itself in the wind passages, the subtle effect of the ptomaine on the system renders futile as yet so many of our efforts to save the patient.

During the last six months, diphtheria has been very prevalent in and around Melbourne, and during the last three, has reached proportions to be almost dignified by the term epidemic. I have had the misfortune to see either alone, or with other medical men, seventy-three cases, and I purpose to place before you the treatment adopted, and the results.

For the purpose of this paper, I propose roughly to divide these cases into first, cases where the disease did not involve the larynx; and second, cases that did. Of the first section, there were forty, in which nine died; of the second, there were thirty-three, in which twenty-eight died. Of the first class, the local manifestation in thirty-nine was in the pharynx; in one it was in the vulva. Of the laryngeal cases, tracheotomy was performed in eleven cases, ten of which died; intubation in three, all of which died. The local and constitutional treatment adopted was as follows:—Ten of the cases treated with eucalyptus steam, both of gum leaves and oil; internally given iron and acids; all died. Five of the cases treated with eucalyptus and liq. hyd. perchlor. internally, one recovered. Eighteen of the cases treated with sulphurous acid and liq. hyd. perchlor., four recovered, including one tracheotomy. In all the cases, stimulants and heart tonics were used in addition to the specific treatment.

Of the pharyngeal cases, in all the cases the death took place by heart failure; and as some of the cases were subjects that were already suffering from other exhaustive disease, the result is easily explainable. The treatment in the pharyngeal cases was various, any of the so-called antiseptic applications were found

sufficient to keep the exudations cleaned off the throat; and as an atmosphere, one impregnated with sulphurous acid was found most beneficial (particularly if dry), as obtained by burning sulphur in the room. Two of the cases were treated for two days by the method recommended by Dr. Murray Gibbes—i.e., inhalation of blue gum steam, made from New Zealand leaves sent me by Dr. Gibbes. They were both fairly severe cases—in both the membrane fairly covering both sides of the fauces. No other treatment was adopted. At the end of forty-eight hours the membrane was but little altered, if anything it had spread. The cases were sponged with zymine; put on liq. hyd. perchlor. and iron, and free stimulation: in another forty-eight hours the disease was virtually stopped. After this experience, I must confess I had not courage to treat any of the laryngeal cases with blue-gum steam alone, but in all cases where it was used, supplemented it with free stimulation, which I look upon as the only antidote we have to the ptomaine poisons, and the use of antiseptics internally. In the laryngeal cases, sulphurous acid, turpentine and eucalyptus were used, in steam tents, the moist air being more grateful than the dry antiseptic.

The sequelæ were frequently of nerve paresis type, and proved fairly amenable to treatment by tonics and massage. Knee-jerk was absent in all these cases, but a symptom described lately, of sweating of the affected part, I found in none of my cases.

Tracheotomy was performed in eleven of the cases, and should have been done oftener if the cases had been seen earlier, or if the parents would have consented. I am convinced that the only chance of doing good in tracheotomy is when the obstruction is such, that there is a likelihood of the tube reaching below the membrane; and I am convinced that it should be more of an operation than it is at present, not being merely content with inserting a tube, and seeing that there is free ingress and egress of air, but if possible, thoroughly cleansing the windpipe above the opening with some antiseptic, and plugging the wound above with an antiseptic tampon. If I am right in this, intubation is rarely likely to be of use; in fact, of three cases in which I did it, in one it was immediately necessary to perform a tracheotomy, the introduction of the tube having carried before it a plug of membrane. I think intubation has a great future before it in benign obstructions about the vocal cords; but I am afraid, when dealing with a poisonous infectious membrane, as in diphtheria, it will be found wanting.

The part that the condition of the patient plays in prognosis of the disease was well exemplified in an unfortunate little epidemic that we recently had in the Children's Hospital, for the notes of which I am indebted to Dr. Wood. Twelve children took it, of which two were suffering from morbus coxæ, one from morbus cordis, one from diabetes insipidus, and eight others, just convalescent from, or in one of the stages of, typhoid fever. They all died.

To sum up, the method of treatment I would adopt in a case of diphtheria, where the larynx was not effected, would be as follows:—Apply to the membrane a free cauterisation with strong nitric acid; afterwards mop out with a strong solution of zymine or lotion of liq. hyd. perchlor; burn sulphur freely in the room, and if patient will allow it, free spraying of the parts with sulphurous acid solution (1 in 8); internally, stimulants and liq. hyd. perchlor. in large hourly doses, stopping on the appearance of salivation, and guarding it with a heart tonic like digitalis or nux vomica.

If the case is already, or becomes, laryngeal, early tracheotomy, the use of a tent, with sulphurous acid steam as strong as will be tolerated. The same internal treatment as before.

In conclusion, I would like to mention the difficulty of diagnosis in some cases. So difficult is it, and so frequently are mistakes made even by good observers, that I am strongly of the belief that especially during an epidemic of diphtheria, benign inflammatory affections of the throat and air passages are liable to take on a diphtheritic action, the fact of there already being some inflammatory abrasion about the throat offering a suitable nidus for the diphtheritic poison. It is henceforth of double importance that all cases of diphtheria be carefully isolated, and thorough disinfection of all rooms and wearing apparel be rigorously carried out. Jacobi recommends that during an epidemic, public vehicles be disinfected, the *morale* of which, though no doubt useful, can hardly be otherwise of much use as a safeguard.

Table of Laryngeal Cases.—Constitutional and local treatment.

Treatment.	No. of Cases.	Died.	Recovered.
Eucalyptus steam and iron internally ..	10	.. 10	.. 0
Eucalyptus steam and liq. hydrarg. perchlor. internally	5	.. 4	.. 1
Sulphurous acid steam and liq. hydrarg. perchlor. internally.. }	18	.. 14	4, including 1 tracheotomy

Dr. WILLIAMS asked that the points to be discussed should be defined.

The PRESIDENT stated that it had been determined in Committee that the discussion should be limited to treatment, and he would ask members to confine their attention to the local, general, and operative treatment of diphtheria.

Dr. WILLIAMS said a discussion on this subject was very important at the present time, when diphtheria was so prevalent. In dealing with treatment, it was impossible to avoid touching on the subject of causation to some extent. Thus, to begin with, there was more than one form of diphtheria. In one form, the pharynx was extensively affected, and the general symptoms were almost absent. The disease appeared to be local, and in such cases, local treatment was of most importance. In another form, the patient was quite knocked down by the poison, and nearly dead before any marked local manifestations could be detected. In this respect, diphtheria resembled scarlet fever, which varied greatly in its malignity in different epidemics; and in different cases in the same epidemic. In short, we have diphtheria and diphtheria. For the disease, as we ordinarily see it here, he had a liking for one plan of treatment carried out thoroughly, but it must be done thoroughly. This plan consists in placing the patient in a room, the atmosphere of which is thoroughly impregnated with the fumes of burning sulphur, and so strongly that anyone coming fresh into the room can hardly bear it. In addition to this, the patient must be supported, and he also often paints the throat with a solution of tannic acid, so as to regularly tan the membrane. This plan of treatment has been satisfactory in his hands. He has watched a patch of membrane on the under surface of the epiglottis shrink away under this method, instead of extending into the larynx. He objects to steaming patients in a tent; it reduces their vitality, and he thinks the warm moist atmosphere promotes the growth of the deposit. Tracheotomy is very unsatisfactory; patients who require it almost always die even if it is done, and it tends to bring surgical interference into disrepute. If the parents wish it, the operation should be performed. The essential thing in the treatment is thoroughness and persistence.

Dr. CLENDINNEN asked Dr. Snowball what had been his experience of lactic acid and lime water as a solvent. He had found it very useful, and exhibited some membranes ejected under its

use. Cocaine he had also found useful to reduce œdema, and glycerine and boric acid locally as a detergent.

Dr. W. A. WOOD referred to a recent paper in the *British Medical Journal* on antiseptics, in which it was stated that sulphurous acid was useless as a destroyer of bacteria. He was also at a loss to understand the *rationale* of perchloride of mercury given internally, as when once in the blood, it becomes an albuminate; empirically however, it appeared to be beneficial.

Dr. WORKMAN thought that as to treatment, diphtheria resembled cholera. The treatment of both was very varied, and depended on various theories. At the beginning of an epidemic, all treatment proved futile; at the end, everyone had a panacea. The first epidemic he had seen in England made a great impression on him; thirty or forty cases occurred in a few months, and all died. Granting that the disease be due to a bacillus, it ought to be useful to use hydrarg. perchlor. internally and externally. A recent writer recommends mustard emetics, stating that mustard is a powerful germicide. Support was of the greatest importance to tide the patient over the danger.

Dr. DAVENPORT said he was glad a discussion had been arranged on the treatment of this terrible disease, in which no one set plan of treatment seemed of any avail. Locally, it required the strongest antiseptics that could be borne. Sulphur was one of the strongest and least irritating, and a spray was less irritating than the fumes of burning sulphur, which set up a kind of asthmatic paroxysm in people who can stand a spray. He uses a steam-kettle, in which is placed a tablespoonful of sulphurous acid every hour, or half hour. He also paints the throat with a stronger solution. Constitutional treatment is just as essential, and one cannot stimulate too much, either by alcohol or by drugs. Hydrarg. perchlor. probably acts in this way as a hæmatinic tonic, and not as an antiseptic. It causes multiplication of the red blood corpuscles. He objects to emetics, especially vin. ipecac. He has seen a child, who he believes was killed by the persistent use of this agent by its parents, in the absence of the medical man.

Dr. ROTHWELL ADAM had seen about twenty or thirty cases in the last few years, and of these only three had recovered. He had no settled plan of treatment. Lately, he had used the fumes of burning sulphur; and locally, pure permanganate of potash. Internally, he gave perchloride of iron. He thought swabbing the

throat with some antiseptic of importance. With regard to operative treatment, it must be remembered that in general practice it was often impossible to put the patient in a favourable condition after the operation. Skilled nursing could not be had, and the results were very unfavourable.

Dr. BARRETT remarked that, in regard to antiseptics, a universal movement throughout the world could be noted in favour of their use, and yet it had been demonstrated that no antiseptic can be applied sufficiently concentrated to kill microbes. It occurred to him that the value of hydrarg. perchlor. internally really lay in its washing the throat during swallowing.

Dr. KENNY thought it necessary to refer for a moment to the pathology of the disease. Dr. Snowball, quoting Oertel, had said that the microbe was on the surface, and hence antiseptics had a fair chance. We had also to deal with ptomaines. The principle must be to get the membrane away in which the microbes are, and as quietly as possible. He must join issue with Dr. Davenport as to the value of a spray. The spasmodic coughing he referred to, produced by the fumes, was in itself evidence that the remedy reached the lungs. As to operative interference, Dr. Snowball had been unusually unfortunate in his experience of intubation, but the chief risk undoubtedly was that of pushing membrane on in front of the tube. He thoroughly agreed with Dr. Snowball that tracheotomy ought to be more of an operation than it was; the membranes ought to be removed as well. One point about intubation was that it did not, like tracheotomy, require skilled after-attendance, and hence was more suitable among poorer patients. Recent statistics showed that in tracheotomy, 26½ per cent. recovered; in intubation, 26½.

Dr. J. P. RYAN complimented Dr. Snowball on the style of his paper, but at the same time he considered such a discussion as this a mere waste of time. We know really nothing about the pathology of the disease, and our treatment is of little avail. We have no specific, and must simply direct our efforts on common-sense lines. We must treat individuals, and not the disease. As showing how easily we may be misled, some time ago he tried the local application of iodoform dissolved in ether. It seemed beneficial in one case; he tried it in another, and carefully applied it to only one side of the pharynx. The patches cleared up from this side, but they cleared up equally well from the other side to which no application had been made. Just now we are all

imbued with the bacillar theory, and accordingly used fumigation, and as long as the theory was upheld, it would no doubt be necessary to fumigate. He thought ventilation was of some importance, and kept his patients in the open air as much as possible.

Dr. DUNCAN could not agree with Dr. Ryan, that the discussion was useless. The expression of individual opinions was by no means valueless. He would suggest that this Society appoint an Investigation Committee, as the British Medical Association did in Great Britain. He could not agree with Dr. Ryan, that we had made no advance in our knowledge of the pathology of the disease. He thought we had made greater advances in the pathology than in the treatment. He agreed with Dr. Williams, that there is diphtheria and diphtheria. He agreed with Dr. Ryan, that we must treat the personality of the patient. He objects to putting patients under a tent, and steaming them, as being too exhausting. He had tried eucalyptus leaf steam, but was not prepared to say anything definite as to its results. He could say we had no specific for the disease. He believed in the use of sulphurous acid fumes. He had been much struck with the effect of dry perchloride of iron applied to the uterine stump when treated extra-peritoneally, and it suggested its application, as Dr. Williams put it, to "tan" the membrane in diphtheria. It must be remembered, that the exudation was not so superficial as some speakers had stated. Regarding intubation, experience showed that it could not be used safely even by specialists, much less by the general practitioner. He was not aware before, that hydrarg. perchlor. acted as a hæmatinic in the way mentioned by Dr. Davenport; nor did he see why it should be inert as an albuminate. In treating every case, it is necessary to consider the individual, the hygienic surroundings, and the character of the epidemic.

Dr. JAMIESON did not see how our views on treatment could be separated from our views on causation. If we believe, as personally he held most strongly, that the disease is essentially local at first, and that the constitutional symptoms are secondary, we should pay most attention to local treatment; and *vice versa*, if we believed the disease to be constitutional from the first, we shall be apt to neglect local treatment. While there may be great differences in different cases, it cannot be said there are two diseases. The very analogy with scarlet fever, suggested by Dr. Williams, showed that

it is always one and the same disease, but varied in its manifestations. The cause of the variance we don't know. The cause of failure in treatment, in many cases, is because local treatment is not carried out thoroughly and properly. Though we have no specific, we possess several remedies—sulphurous acid, carbolic acid, resorcin, lime water—from which good results can be obtained if systematically used. With reference to sulphurous acid, he had found it useful, especially the fumes from burning sulphur, but he would not trust to it alone, but would also use a spray as strong as could be borne, and as frequently as possible. The great advantage of sulphurous acid is that it is safe, which is not always the case with other antiseptics. The great essential is to treat the case early, locally, thoroughly, and persistently, and his favourite plan is to alternate a spray of carbolic acid with one of sulphurous acid. He doesn't think there is time in so rapid a disease as diphtheria for hydrarg. perchlor. to act much in the way of a blood re-constituent; probably, it really acts locally. In a recent Berlin journal, a writer stated that he had had excellent results from lime water, frequently used internally and externally. We cannot expect to get much effect from strong remedies applied occasionally, the application must be gentle and constant. Internal remedies are useful to meet certain indications as in any other disease, and we may give alcohol or quinine, just as we give them in typhoid fever. We must keep the patient alive while the local measures can act.

Dr. ROSS said that recent German statistics showed that the disease was most prevalent when the atmosphere was dry, and least prevalent when it was moist. Hence the necessity for steam sprays. Lime water is an excellent application. The bacilli of Lœffler are found also in the healthy mouth. The bacilli are in the depth of the membrane, as well as superficially; and it is difficult for antiseptics to get at them, unless the membrane is removed, and then there is danger of particles getting into the larynx.

Dr. JAMIESON asked permission to explain that it was impossible to apply a remedy so strong as to kill all the bacilli present. What should be aimed at was to render the surrounding tissues a soil on which the bacilli will not develop, and to keep the disease from spreading.

The PRESIDENT said the Society was indebted to Dr. Snowball for the admirable account he had given of his experiences. He

regretted that a more definite result had not been attained. No general consensus of opinion had been arrived at. Personally, he held strongly to the local nature of the disease, and that if the local spot be destroyed, the disease will be checked. By destruction, he did not mean forcible removal. He used half and half of hydrochloric acid and water. He did not believe in steaming, but did in dry air and sulphur fumes, and the exhibition of tonics, food, alcohol (which is also a blood antiseptic), and iron. In bad cases, you cannot get the seat of the disease removed, and they die, no matter what you do.

Dr. SNOWBALL, in reply, said it was gratifying in one way, lamentable in another, that other members' experience was as unfortunate as his own. The difference in cases depended on the difference in the part attacked. When the disease is in the air passages the cases mostly die. There is one point worthy of note. If a pharyngeal case dies, it dies poisoned; a laryngeal case dies choked. A number of members seemed to agree about the advantage of sulphur. In laryngeal cases, he liked steam. There is ordinary laryngitis as well, and nothing is so soothing as steam, as he knew from personal experience. He had known patients ask for the steam, so great was the relief it gave. Personally, he believed that the future treatment would be along the lines suggested by Pasteur's attenuated virus inoculations. Another point that occurred to him was, that the profession might do more than it does in the prevention of the disease. It is most certainly a filth disease, and ought to be prevented. It is most lamentable that so many cases die, do what you will; and in fact, the question in his mind was—Are not the cases that recover cases that would get well if left alone?

MEDICAL SOCIETY ANNUAL DINNER.

The annual dinner of the Society was held in the supper-room of the Town Hall, on Wednesday, the 6th inst. The President, Dr. Balls-Headley, occupied the chair, and was supported on his right by Dr. Robertson, and on his left by Dr. Cutts. The vice-chairs were filled by the Vice-Presidents, Professor Allen and Dr. Hinchcliff. A fair number of members attended, but the counter attractions of other entertainments must presumably be held responsible for the absence of so many leading men.

The toast of the Queen having been duly honoured, the President proposed "The Medical Society of Victoria." In 1846,

a meeting of the medical profession was convened at the Prince of Wales Hotel, by Drs. Howitt, Wilmot and Cussen, for the purpose of organising a society for the promotion of the interests of the medical profession. The result of the meeting was the formation of the Port Phillip Medical Association, a society which existed a considerable time. In 1852 a new society was established, called the Victorian Medical and Chirurgical Society; and the present Medical Society was formed on July 18, 1855, by the amalgamation of the two previous societies. Its first President was Dr. Fisher, and its first Secretary, Dr. Black. At its first meeting were present :—Drs. Lucas, Tracy, Whitcombe, McCrea, Fisher, Maund, Livingstone, O'Reilly, Abbott, Qualtrough, Motherwell, Collings, Farrage, Black, Turnbull, Van Hemert, M'Nicholl and Gillbee; of whom, Drs. M'Crea and Fisher were still alive. The Medical Society of Victoria was thus one of the oldest medical societies in the British dominions. The *Australian Medical Journal* was instituted in 1855, and was the oldest monthly medical journal in the British dominions. The progress of the Society was commensurate with the progress of Victoria itself. In 1864 — nine years after its establishment — the number of members was 49, in 1870 it was 65, in 1880 it was 107, and in 1888, 235. With regard to the objects of the Society, it was inaugurated, in the first and foremost place, for the diffusion of medical knowledge, which was effected by the reading and discussion of papers. A great deal of good had been done in this way, quite equal to what would fairly be expected in the most progressive colony of Great Britain. A second matter that the Society had taken notice of was the public health, and questions of drainage and water supply; and he might mention that an eminent and hardworking member and officer of the Society, Professor Allen, was now Chairman of the Sanitary Commission. He hoped the recommendations of this Commission would enable typhoid fever and phthisis to be presently brought under control, and the death-rate diminished. A third point for which the Society had striven was the proper recognition in Great Britain of the medical degrees of the Melbourne University, and to this end, at the instance of this Society, a Bill would shortly be introduced into Parliament. Another matter the Society endeavoured to secure was, that the profession should be recognised as honest and honourable in its conduct, and taking honour in its degrees, and the Society was therefore seeking to obtain a proper

registration of medical practitioners in the colony. There was no desire to do harm to any one who might wish to be treated by an ignorant man. If he desired to go to a Chinese doctor, by all means let him do so, but that Chinese doctor should not pretend to be an educated man. The people were protected with regard to lawyers, and the medical profession should be placed on an equal footing. Questions of medical ethics sometimes came before the Society, but not frequently. "Do unto others as you would that they should do unto you" was the golden rule of medical as of all other ethics. The social element had of late, perhaps, not entered sufficiently into the Society's arrangements. It was good for the members of the profession to meet and chat over other than professional affairs.

The toast was drunk with enthusiasm.

Dr. HAIG then briefly proposed "The Victorian Branch of the British Medical Association," and referred to the good work it had done.

Dr. SHIELDS (in the unavoidable absence of the President) replied. The Association, though a younger branch, was thriving, and had a most filial feeling towards the Medical Society.

Prof. ALLEN proposed "The Past Presidents of the Society." They typified the life of the profession in Melbourne. The Society had been exceptionally fortunate in its presidents, and ought to be proud of such a list of names as Turnbull, Tracy, Ford, Neild, Halford, Robertson, James, FitzGerald, McGillivray, Bowen, Haig, and others. He coupled the toast with the names of Drs. Cutts and Robertson, two of the oldest officers of the Society. Dr. Cutts had been for long the Treasurer, while Dr. Robertson was Secretary before Dr. Neild took that office.

Dr. CUTTS replied. He had been President in 1866, but of late felt that he was somewhat out of touch with the Society. He thoroughly approved of meetings like the present, and thought the social element too much neglected. A proposal had been made to have refreshments at the ordinary meetings, but that was not desirable; science and festivity should not be mixed up, except at a *conversazione*. In the old days, it used to be a custom to have quiet little suppers at each other's houses; but the custom fell through, owing to members vying with each other in ostentation. Members of the profession ought to meet more frequently socially. Competition was so keen, and was increasing; and it was not favourable to sentiments of good fellowship, or the

well-being of the profession, unless counteracted by gatherings of this kind.

Dr. ROBERTSON, in reply, said that he arrived in Melbourne in 1855, but he did not at once become a member of the Society. The Society was very exclusive in those days, and a period of probation was necessary. He soon became an officer—first as Librarian, then as Secretary. Then came a *hiatus*, owing to a question of medical etiquette, with reference to another member, who advertised. This member resigned, and Dr. Robertson resigned also.

Dr. JAMIESON proposed "The Country Members of the Society." The country practitioners were the backbone of the profession. Several Presidents had been country members, and eminent men. He had only to mention the names of Day and M'Gillivray. That more were not Presidents was their own fault; they repeatedly declined the honour.

Dr. HINCHCLIFF replied, and alluded to the difficulties of country members attending. Still, they did their best to keep the Society going.

Dr. J. P. RYAN proposed "The past and present Editors of the *Australian Medical Journal*," and paid a high tribute to the men who worked to keep the Journal continuously in existence since 1855. Drs. Maund and Black were the first editors; then Dr. Wm. Thomson, from 1859 to 1861; then Dr. Neild, from 1861 to 1878; then Professor Allen till 1881, and finally Dr. Jamieson. Still, there was room for improvement in the Journal. The editors were not overwhelmed with contributions, but had to work hard to obtain them.

Dr. SYME replied.

Dr. W. A. WOOD proposed "The Ladies," and the toast was responded to by Dr. KENNY.

The last toast was "The President," proposed by Professor ALLEN, and drunk with enthusiasm.

Dr. BALLS-HEADLEY replied, and the meeting broke up.

During the evening, Drs. Charles Ryan and Haig contributed songs. The dinner was excellently served by Mr. H. Skinner.

The annual meeting of the Australian Health Society was held on the 28th ult., at the Independent Hall, Russell-street, the President (the Chief Justice) being in the chair. The annual report and balance-sheet, both of which were of a satisfactory character, were adopted. Dr. Neild, for Miss Alice Henry, read a paper entitled "The Great Untaught." Dr. G. A. Syme read a paper on "The Spread of Consumption, and Its Prevention;" and Mr. T. Brodribb contributed one entitled "Suggested Sanitary Restrictions for New Buildings."

Hospital Reports.

MELBOURNE HOSPITAL.

Case of Extra-Uterine Foetation.

Under the care of Mr. C. RYAN.

Reported by F. J. DRAKE, M.B., Ch. B., Resident Medical Officer.

K. K., age 42, admitted August 20, 1889, married. She states that she was in very good health till four months ago, when she got wet through, and was laid up with severe pain and swelling in the abdomen. The swelling was in the left side of the abdomen. She has suffered pain about the region of the lump since the illness. The lump did not seem to increase in size since it was first discovered, but rather decreased in size, "it having become more flat." Menstruation was always regular till the above illness, but since then has been irregular and scanty, sometimes only a few drops of blood appearing. She never had copious hæmorrhage from the vagina at any time. Throughout her illness she has never had vomiting, and has been quite free from bladder trouble. The bowels have been very difficult to evacuate, and she had to take purgative medicine regularly. Has never had any miscarriages, and her youngest child is now 13 years old; has four children, all healthy; has not lost flesh; no history of previous illness.

On examination, a tumour in the left groin was found, which appeared to be fluctuant. With two fingers on the vagina, combined with external manipulation, the tumour has a rounded and solid feel, and is connected with the uterus, its situation being well felt through the vaginal wall on the left side. On passing a sound, the uterus was not enlarged, and the tumour was found to be connected with the uterus. An aspirator was passed into the tumour, but no fluid was obtained. Urine sp. gr. 1010; no sugar or albumen. Heart and lungs normal.

Aug. 26. --The patient was anæsthetised with chloroform, and an incision about four inches long was made, extending from the umbilicus downwards. On opening the abdomen, and pressing away the intestines by large warm sponges, a tumour was exposed in the left iliac fossa, covered by peritoneum. The Fallopian tube could be seen passing across the tumour. At one spot, fluctuation could be detected; a trocar was inserted into this, and clotted

blood oozed out. An incision was then made into the sac, and the clotted blood, mostly dark, and a very small portion pale, was scooped and sponged out. On passing the finger into the sac, the uterus could be felt protruding into the lower portion of the cavity; no placenta or foetus was discovered in its contents. The cyst wall was drawn well forward by silk ligatures, and secured to the opening in the abdominal wall, and the sac was freely washed out with carbolic lotion (1 in 200). There was considerable oozing of blood from the edge of the cut sac, and in a little band running across the tumour an artery was divided, which required a ligature. A large drainage tube was inserted into the lower end of the wound, and the cavity well dusted with iodoform. The skin edges were not brought together, but the wound left open, and dressed with perchloride of mercury absorbent gauze, and salicylic wool; $\frac{1}{4}$ grain of morphia was given just before the operation was completed, as the patient showed signs of vomiting. The operation lasted one hour and a half.

9 p.m. the same evening.—Patient is feeling well, but is inclined to vomit; is getting a little ice and sodawater. Temperature normal. No pain. Quarter of a grain of morphia given.

Aug. 27.—Had a very good night. Slept almost all night. Vomited a little this morning. Wound dressed, and several clots of blood were washed out of the wound. There had been considerable oozing of blood into the dressings. Pulse—Morning 95, evening 118. Respirations—Morning 29, evening 32.

9 p.m.—Still vomiting. Is unable to keep anything on her stomach. Has very little pain, but is restless. Quarter of a grain of morphia.

Aug. 28.—Vomiting again to-day. Only getting ice and sodawater. There is slight distension and hardening of the abdominal muscles, with tenderness in each flank. Considerable blood-stained discharge. Mij. of a cocaine solution (4 per cent.) had very little influence on the vomiting. Pulse—Morning 116, evening 120. Respirations—Morning 28, evening 29.

9 p.m.—Vomiting still. Enema of peptonised milk given and retained. Complaining of pain in abdomen, which is tender on pressure. Quarter of a grain of morphia. Tongue moist, coated.

Aug. 29.—Vomiting stopped. Kept a little milk and sodawater down. Slept very well last night. Wound looking very well. Slight distension of the abdomen, still with tenderness.

Pulse—Morning 108, evening 118. Respirations—Morning 24, evening 26.

Aug. 30.—A slight blush round the edges of sutures, but edges of wound looking well. Pulse—Morning 112, evening 116. Respirations—Morning 23, evening 24.

Aug. 31.—Takes food very well; chicken broth given this morning and kept down. Abdominal muscles quite soft. Pulse—Morning 118, evening 116. Respirations—Morning 23, evening 24. Temperature normal, morning and evening.

Sept. 1.—Good deal of discharge. Slept well. Takes food well. Pain less. No distension of abdomen. Pulse—Morning 108, evening 114. Respirations—Morning 23, evening 24. Tongue moist, coated.

Sept. 2.—Complaining of pain this morning. Quarter of a grain of morphia. Wound looking well.

The temperature remained normal throughout the course of the case, and she convalesced, and was discharged on the 9th October 1889, the wound having almost healed.

Australian Medical Journal.

NOVEMBER 15TH, 1889.

TRAINING SCHOOL FOR NURSES.

The visit to England, of the Secretary to the Melbourne Hospital, is beginning to have some practical results. The Committee of Management are advertising for a matron, and, "in addition to evidence of administrative ability, candidates must furnish proof of having passed a full course of hospital training in the details of nursing, and also ability to teach the general details of nursing." This is distinctly a step in advance, and may be regarded as the first indication of an attempt to institute an efficient training school for nurses at the Melbourne Hospital.

Why has this attempt not been made before? Chiefly, apparently, because—so long as the nursing was not glaringly inefficient, and the staff did not make formal complaint—the powers that be were quite content with things as they were. There were, and are still, undoubted difficulties in

the way of introducing a new order of things. The chief difficulty is want of room—the same difficulty that blocks all reform at the Melbourne Hospital.

A correspondent in one of the daily papers points out that the nurses' bedroom has not even a toilet service, but each nurse takes her turn to perform her ablutions in the bathroom; that the food is badly cooked and served; and that the pupil nurses have nothing but menial work to perform, and receive no theoretical instruction or friendly counsel from the matron or any one else. The acting matron admits that the food is badly cooked and the tea undrinkable. The result is that the nurses at the Melbourne Hospital are almost all drawn from the same class that supplies domestic servants, and changes are constant. Considering the class from which they have been drawn, the head nurses in the Hospital have been remarkably efficient as far as regards their practical work, and many of them have picked up for themselves an amount of knowledge that is creditable to them in the highest degree. Still, none of them pretend to be gentlewomen, or to possess that sympathy and refinement which adds so much to the efficiency of a hospital sister in other places. It is not essential that all the nurses in the hospital should be ladies, but certainly some of them should be. Unless they are to be treated as ladies, however—that is to say, fairly paid, given a reasonable amount of leisure, a private room, and well-cooked, decently-served food—such a class will never be obtained, either as pupils or nurses. At present, the accommodation at the Melbourne Hospital is far from sufficient for this purpose, and it is difficult to see how sufficient accommodation can be obtained on the present site.

Still, as stated at the outset, the appointment of a matron, on the lines suggested by the advertisement of the Committee, is the first step; and it is to be earnestly hoped that the Committee will use every endeavour to secure as a matron a gentlewoman of refinement and tact—a thoroughly trained nurse herself, and also capable of teaching others. If a lady possessing these qualifications cannot be obtained here, the Committee should invite applications in the United

Kingdom. The action taken by the Committee in this matter will be very closely scrutinised, and any attempt to appoint an ignorant and unsuitable person will never be tolerated by those subscribers who have the best interests of the hospital at heart.

The next step should be the institution of evening lectures for nurses by the staff. These should include lectures on elementary anatomy, physiology, hygiene, and dietetics, bandaging and dressing, and the nursing of particular classes of surgical and medical cases. The lectures on the general principles of nursing and practical demonstrations should be given by the matron. If comfortable quarters could then be provided for the pupils, a very useful and efficient training school would soon be established.

THE DIPHTHERIA DISCUSSION.

The results of the discussion on the treatment of diphtheria at the last meeting of the Medical Society, are perhaps not very great, but that such a discussion is useless, as Dr. J. P. RYAN would have us pessimistically believe, is a verdict we cannot endorse. It is, as Dr. SNOWBALL remarked, very lamentable that so many cases prove fatal, but that is no reason for calmly folding our hands, and saying, "Kismet! we are in the hands of Fate; we know nothing, we can do nothing!" If Harvey, Hunter, Jenner, Pasteur, Koch, and all other original investigators had taken such a view, where would be our boasted medical science?

Of course Dr. RYAN's observation referred only to discussion, not to investigation; but discussion helps us to see where investigation is most required, and what an industrious observer can have some chance of determining. Points of difference are emphasised, points on which there is some consensus of opinion may be more readily accepted as not requiring further inquiry. Thus, some speakers maintained that a moist atmosphere helps the growth of the membrane, and diminishes the vitality of the child; others maintained almost the exact opposite. Surely this is a matter capable of being absolutely determined without very great difficulty, by a combination of laboratory research

and clinical observation. Then there seemed a fair agreement as to the use of sulphurous acid in some form or other, though its use appeared to be, by most, empirical. Dr. JAMIESON was, as usual, logical in his views, and the idea that local antiseptics act by sterilising, so to speak, the adjacent tissues, is at least a rational explanation of their use. It was, perhaps, rather unfortunate that the discussion was limited to the curative treatment. As Dr. SNOWBALL remarked in his reply, prophylaxis is far too much ignored, and efficient isolation of suspicious cases especially, is not sufficiently insisted on. Sufficient care also is not exercised by the medical attendant in warning people of the danger of carrying the contagion about with them. Change of air is ordered during convalescence, and the patient carries the fatal disease to other districts and other families.

Disinfecting apparatus should be provided in different districts, and the sanitary inspectors, health officers, and ordinary medical attendants should see that all clothing and articles of furniture that can be placed in the apparatus should be thoroughly disinfected.

Then again, if due enquiry were made into the sanitary surroundings of every case, and if found unsatisfactory, the state of affairs reported to the local authorities, improvements would in many cases be made.

Reviews.

NOTES ON BOOKS, &c.

Ether as an Anæsthetic. By ISAIAH DE ZOUCHE, M.D. Dunedin : J. Wilkie and Co., 1889.

This is a reprint from our contemporary the *New Zealand Medical Journal*. Dr. De Zouche has been a consistent advocate of ether in preference to chloroform for the past twenty years. He is surprised that ether is so little used in Australia and New Zealand, and from enquiries he finds, that the chief reasons advanced in favour of chloroform are that it is pleasanter to the patient, and more easily administered than ether, and that it is not so slow in its action. Admitting these advantages, he maintains that they are completely counterbalanced by the greater

safety of ether ; and a number of authorities are quoted in support of this view. The pamphlet contains nothing new, but there have been so many exceptionally sad cases of death from chloroform recorded lately, that the advocates of ether do well to urge its advantages. There can be no doubt that it is becoming more generally used. The only point its advocates almost always overlook is, that while ether may not often kill directly, it very often sets up much bronchial irritation, which in some cases may ultimately really turn the scale against a patient's recovery. If it be a fact that ether is less dangerous in all cases than chloroform, no one would think of using the latter simply because more convenient and pleasant. A more reasonable view is that of Dr. Frederic Hewitt, in the *British Medical Journal*, of October 5, 1889. He says :—" Putting aside highly exceptional cases, clinical experience has proved that general anæsthesia may be safely induced and maintained in all subjects, provided that the anæsthetic, which is most suitable under the special circumstances, be employed ; and, conversely, it may be said that if the general state of the patient and other points be overlooked, or disregarded, and an inappropriate anæsthetic administered, difficulties and dangers will be liable to arise. At one time, the choice of an anæsthetic for ordinary surgical operations lay between ether and chloroform ; but with the knowledge we at present possess, it is obvious that the question is not as simple as it then appeared to be. Ether possesses advantages in many cases, chloroform in others ; and there are other agents which, under certain conditions, should be employed in preference to either of the foregoing. Thus, there are some cases in which nitrous oxide alone will suffice for producing anæsthesia ; in other instances, this gas, followed by a small quantity of ether, should be employed ; in a third series of cases, ether will be found to be the most appropriate agent (usually preceded by a small quantity of nitrous oxide) ; in a fourth section, the A. C. E. mixture will be tolerated better than any other anæsthetic ; in a fifth set of cases, chloroform diluted with alcohol should be administered ; and in a comparatively small number of instances, undiluted chloroform must be given."

What to do in Cases of Poisoning. By WILLIAM MURRELL, M.D., F.R.C.P. Sixth edition. London : H. K. Lewis, 1889.

The author remarks that, "a work which has reached a sixth edition needs no elaborate preface." Neither does it need an

elaborate review. The book evidently meets a want, and is so small as to be easily put in the antidote bag, which the author recommends. The style is easy, almost flippant, but the information is accurate and complete.

The A.B.C. Medical Diary and Visiting List, with which is combined the *A.B.C. Materia Medica* for 1890, has been received from Burroughs, Wellcome and Co. It is so well known as to need no comment.

Extracts from the Medical Journals.

Healing of Aseptic Bone Cavities by Implantation of Antiseptic Decalcified Bone.—N. Senn reports the results of experiments and clinical observations on the implantation of antiseptic decalcified bone. He concludes:—“(1) Antiseptic decalcified bone is the best substitute for living bone-grafts in the restoration of a loss of substance in bone. (2) In the treatment of bone cavities, antiseptic decalcified bone is preferable to Schede's blood-clot, as it is not only a perfectly aseptic, but at the same time, also a strongly antiseptic substance. (3) Implantation of a disk or plate of antiseptic decalcified bone into a cranial defect may be relied upon as a hæmostatic measure in arresting bleeding from the vessels of the diploë; it constitutes a good temporary substitute for the lost portion of the cranium; it prevents the direct union of the brain or its envelopes with the pericranium; and finally, it furnishes the most favourable condition for the production of new bone from the margins and the closure of the remaining defect by a firm and unyielding membrane. (4) The packing of an aseptic bone cavity with chips of antiseptic decalcified bone guards against unnecessary loss of blood, and exerts a potent influence in the prevention of infection by pus microbes that might have remained upon the surface of the wound, or in the tissues. (5) Capillary drainage, by an absorbable drain, should be established after implantation, for the purpose of preventing the accumulation of more blood in the wound than is necessary to form a temporary cement substance between the bone chips and between the contents of the cavity and the surrounding tissues. (6) In the treatment of an aseptic bone cavity by implantation of chips of antiseptic decalcified bone, the packing answers the purpose of an antiseptic tampon,

and furnishes the best medium for the growth and development of the tissue, resulting from the regenerative process initiated by the trauma. (7) Secondary implantation can be successfully practised in the treatment of a suppurating bone-cavity after suppuration has ceased, and the cavity can be transformed into the same favourable conditions for healing as an aseptic wound." He prepares his bone from the fresh tibia of an ox. "The bone is cut in sections two inches in length, and after carefully removing the medullary tissue, is kept in dilute muriatic acid, the fluid being changed every few days, until the process of decalcification has been completed. After this has been accomplished, the bone can be readily cut into pieces about one millimetre in thickness, making the sections parallel to the long axis of the bone. The acid is then removed by washing and by keeping the bone immersed in a weak solution of caustic potash. The bone is then rendered antiseptic by keeping it until it is needed in a solution of sublimate in alcohol (1-500), in a wide-mouthed bottle, which is kept hermetically sealed by a glass stopper, to prevent evaporation of the solution. When the bone is needed, it is taken from the bottle and placed in a 5 per cent. solution of carbolic acid, or a weak solution of sublimate. In making the plates or disks for filling a cranial defect, the bone is cut so as to correspond in thickness to the bone removed, and accurately to fit into the opening. A number of small perforations in the disk or plate should always be made, as through these openings the space underneath the bone is kept drained; at the same time the early entrance of granulation tissue into these openings effects fixation of the bone *in situ*, and favours the early removal of the implanted substance by substitution with permanent living tissue. Before implantation, both sides of the plate should be dusted with iodoform. For packing bone-cavities, the decalcified bone should be cut in thin slices or chips, which should be laid upon a compress of aseptic gauze, so as to remove the surface moisture when they are dusted with iodoform before they are implanted into the cavity. Aseptic decalcified bone-drains, in the absence of more suitable material, can be used in packing bone-cavities." The most essential condition for success in the treatment of bone defects by this method is a perfectly aseptic condition of the tissues to be brought in contact with the implanted bone. Hence the most favourable cases for the procedure are lesions other than those caused by infection with pus microbes, such as tumours,

parasites, and tuberculous and syphilitic affections uncomplicated by suppuration. The next most favourable cases are circumscribed osteo-myelitic processes in the epiphyseal extremities of the long bones, either primary or in the form of a recurring attack in the same place, perhaps years after a diffuse osteo-myelitis of the entire shaft. The operation should, when possible, be performed by the bloodless method, and the periosteum should be carefully preserved in exposing the bone, and after the implantation, be sutured over the surface of the bone chips with catgut sutures. It is of great importance to secure accurate apposition of the divided soft parts, in order to preserve for the subjacent bone all of its natural coverings.—*American Journal of the Medical Sciences.*

The Value of Creolin, Hydronaphthol, and Sodium Fluosilicate as Germicides.—Dr. Charles J. Foote records the results of experiments undertaken to determine the germicidal power of sodium fluosilicate, hydronaphthol, and creolin, as compared with one another, and some of the older germicides which they tend to supplant, such as mercuric bichloride, carbolic acid, and thymol. He places them in the following order:—(1) Bichloride, 1 to 20,000; (2) Carbolic acid, 1 to 100; (3) Thymol, 1 to 240; (4) Creolin, 1 to 100; (5) Hydronaphthol, 1 to 2,300; (6) Sodium fluosilicate, 1 to 246; Resorcin, 1 to 100; Creolin, 1 to 2,000. Creolin, though insoluble in water, forms an emulsion with it which possesses antiseptic and germicidal properties very nearly equal to those of carbolic acid; and as its toxic properties have been shown to be considerably less, its available germicidal strength is greater than that of carbolic acid. It does not benumb the hands as carbolic does, nor crack or roughen the skin as the bichloride does, but renders it smooth and supple. It is not good for sterilising instruments, as the fluid is opaque, and also renders the handles slippery. Creolin is also admirably adapted for intra-uterine and vaginal douches.—*American Journal of the Medical Sciences*, Sept. 1889.

The Brown-Séquard Theory.—In the *New York Medical Record* for August 24, Dr. H. P. Loomis gives the results of his investigation into the effect of subcutaneous injection of the fluid obtained by crushing, in a mortar, a small portion of the testicle of a two-year old ram, with an equal bulk of distilled water, and filtering. The resultant mixture contained no spermatozoa or bacteria; thirty minims constituted a dose. The first class of patients experimented on were in the Bellevue Hospital, and they

had no knowledge of the character of the liquid, and took no medicine during the period of experimentation. The second class were private cases, familiar with the theory and method of treatment. It is curious that no objective results were obtained in the second class, but some peculiar subjective nervous symptoms were occasionally produced—restlessness and feeling of burning heat, although the temperature was normal. The same symptoms were produced in one case in class I. Dr. Loomis concludes that this is to be explained by some unexplained influence of the mixture on the nerve centres, which must render its employment a matter of caution. When used in cases of actual disease, no modification of pathological conditions or processes has been recognisable. In almost all cases of *old men*, he seemed to see an increase in strength and vitality, and he concludes that the injection does—as claimed—produce “nutritive modification” in the tissues of elderly men, due probably to stimulation of the nerve centres. But, so far as his own experiments are concerned, sufficient time has not yet elapsed to justify an affirmation or denial of the correctness of Brown-Séquard’s conclusion, “That the alterations in muscular structure, not essentially allied to old age, may disappear, and a recovery of former power by the tissue supervene.”

In the *New York Medical Journal* of August 31, Dr. W. A. Hammond records his experience of the method. His *modus operandi* is similar to Dr. Loomis’, but the fluid contained spermatozoa. He first injected himself, with the result that his left arm, which, as the result of an accident, had been much impaired in movement, recovered its power, and became free from pain. He observed no general effects from the injection. Ten cases in all were experimented on, with the result of improvement in physical strength in six, and of sexual power in two. He concludes that there is evidence to show that we have in the testicular juice a valuable addition to our *materia medica*, the precise worth of which, however, it is not yet in our power to establish. He condemns in strong terms the action of sensational newspapers who speak of the method as an “Elixir of Life,” or as an agent capable of making an old man permanently young again.

Dermatology.—The Congress of Dermatology and Syphiligraphy at Paris lasted five days. Many important questions were discussed in it; the first day’s proceedings were summarised as follows:—

MM. Brocq, Schwimmer, and Unna decided that Dühring was right in classifying separately bullous affections, which present special characteristics. Kaposi maintained that all the forms of disease known as "Dühring's disease," can be included in one of the classes already defined. It was also decided that Dühring's classification requires revision. M. Kaposi stated that Dühring's classification would dwindle away by degrees; when diagnoses are skilfully made, each affection will be included in the nosological categories existing. The Congress unanimously admitted that syphilis, badly treated, frequently results in tertiary symptoms—6 or 8 per cent. of syphilitic patients exhibiting tertiary symptoms. These symptoms appear much earlier in the course of the disease than is generally believed. Nervous disturbance is the most frequent, skin diseases of syphilitic origin being considered separately. Dr. Semmola, of Naples, stated that it is often difficult to decide on the moment when mercurial treatment should cease; examining the blood to ascertain the number of globules, and the proportion of hæmoglobin they contain, is the only method. When the trouble resulting from specific treatment ceases, a chromocytometric examination should be made every three or four days; if the proportion of hæmoglobin increases, mercury should be administered; if it decreases, the patient is cured, and mercury has a toxic effect. M. Quinquaud described a new cutaneous affection, characterised by the appearance of tiny bumps, which develop very slowly, are very hard, and resemble xanthoma; their initial appearance is in the clavicular region; they spread slowly over the whole trunk and the limbs. M. Quinquaud believes them to be of epithelial origin; they are benign, and he designates them "epithelial eruptive cystic celluloma." They are quite different from epithelioma. Dr. Raymond read a paper on peptonuria, in which he stated that the presence of peptonuria had been ascertained in infectious diseases, and in all morbid conditions accompanied by an excess of cell-growth; Dr. Raymond therefore considered it probable that peptonuria would occur in syphilis, and sought to demonstrate its presence. In some instances he met with it, but these were rarer than he expected them to be. He observed peptonuria in serious forms of syphilis (phagedenism, tertiary). — *British Medical Journal*, Oct. 5, 1889.

University Intelligence.

MELBOURNE UNIVERSITY.

At a meeting of the University Council on October 21, a further statement by the Professorial Board of reasons why students who failed to pass the first annual examination, should be allowed to enter at the second or supplementary examination for the subjects only in which they had failed, was taken into consideration. The proposal was made as a substitute for the concession previously made by the Council, that where a student had failed barely in one subject, and had done well in others, a discretionary power should be given to the examiners to allow him his year. After much discussion, a compromise was proposed by Professor Irving to the effect, that the Council was willing to accept a regulation providing that where a candidate had failed in one subject only at the first pass examination, he need be re-examined in that subject only at the next following pass examination, and if he passed, might be regarded as having completed his year; and this proposal was almost unanimously adopted. A draft bill relating to the appointment of a paid vice-chancellor, upon the basis previously adopted by the Council and Senate, was agreed upon, and ordered to be laid before the Minister of Education, with a request that the Government would introduce the bill before the close of the present Session.

At the meeting of the Council, held on the 4th inst., Professor Allen brought under the notice of the Council the hardship that would be felt by many medical students, who had perhaps barely failed in one subject, if they were required to repeat in the beginning of December the whole of the examination work they had done in the latter part of October. Mr. Justice A'Beckett then raised the question as to whether the concession to the students, that had already been agreed upon, could not be made to apply to the current examinations. The proposal commended itself to the members present, and the necessary amendment of the regulations was adopted, and ordered to be sent to the Senate. The Senate will probably meet on the 6th inst., and in the event of the regulation being confirmed, students who have to present themselves at the supplementary examination next month, will participate in the concession.

The Senate, at its meeting on the 6th inst., after considerable discussion, rejected the above proposal.

At its meeting on the 11th inst., the University Council conferred, among others, the following degrees:—

Bachelor of Medicine.—Albert Otto Bobart, William Isaac Boyes, Walter Hansford Bracewell, Thomas Cherry, George William Damman, John Raymond Fox, William Zeus Gregerson, Emil Gutheil, Walter Herbert Jermyn, Alfred Fleming Joyce, Richard Augustus Aloysius Manly, Horatio Percy Martell, Frank Montgomerie Peebles, John Quilter, George Owen Rigby, John Harry Saunders, James Purves White.

Bachelor of Surgery.—Albert Otto Bobart, William Isaac Boyes, George William Damman, William Zeus Gregerson, Emil Gutheil, John Harry Saunders.

The following are the results in Medicine of the recent University Examinations:—

FIRST YEAR.

William Lewis Aitken, Charles James Alsop, Robert Hodgson Anderson, Louis Naish Ashworth, David Avery, Mary Elizabeth Amy Castilla, Patrick Paul Dowling, Colin Gray, John Daniel Hurst, Maurice Patrick Macgillicuddy, Frank Cole Madden, William M'Crae, Francis Alexander Newman, David M'Master Officer, John Ramsay, Stanley James Docker Read, Cyrus Bath Retallack, Alexander George Salter, Herbert Spence, Emily Mary Page Stone, David Waters Sutherland.

SECOND YEAR.

William H. Anderson, William E. Bennetts, John Box, Ralph C. Brown, Thomas W. Brown, William T. Chenhall, William E. Davies, William Davis, Frederick J. Gawne, David T. Harbison, John A. Hawkes, Alfred H. Horsfall, James K. Jackson, Matthew F. Kelly, Thomas J. W. Kenny, George J. Ley, William J. Long, Martin M. Lyons.

THIRD YEAR.

Edgar A. Barrett, Robert A. Buntine, Edward Champion, Egbert J. Connell, Ernest A. De Ravin, Frederick W. Dickens, Louis J. F. Dombreu, Paul W. Farmer, John K. Freyer, John Gordon, John L. Henderson, William F. Hopkins, Robert A. Horne, John J. Kitchen, David H. E. Lines, Frank E. Littlewood, William D. K. Macgillivray, George G. Nicholls, Annie G.

O'Hara, Elizabeth A. M. O'Hara, Charles R. Player, Ernest E. R. Sawrey, Richard E. Shuter, James H. Sleeman, Albert E. Sprod, Grace C. Stone, Edward A. Strahan, Margaret Whyte.

FOURTH YEAR.

James Abernethy, Stanley S. Argyle, John T. R. Cook, John H. J. Crowley, Leslie Davies, Horace P. Godfrey, John R. Harris, Arthur M. Hill, Edgar Holcroft, Robert H. Jones, Caleb Joyce, William Kenny, Matthew Lang, John G. M'Kay, William W. B. Pinning, Garnet Soilleux.

FIFTH YEAR.

Albert O. Bobart, William I. Boyes, Walter H. Bracewell, Thomas Cherry, George W. Damman, John R. Fox, William J. Gregerson, Emil Gutheil, Walter H. Jermyn, Alfred F. Joyce, Richard A. A. Manly, Horatio P. Martell, Frank M. Peebles, John Quilter, George O. Rigby, John H. Saunders, James P. White.

HONOUR EXAMINATIONS—SECOND YEAR.

JUNIOR DESCRIPTIVE AND SURGICAL ANATOMY.

First Class.—Ralph C. Brown, David T. Harbison and John A. Hawkes equal.

Second Class.—William H. Anderson and David M. Morton equal, William T. Chenhall.

Third Class.—William J. Long.

PHYSIOLOGICAL CHEMISTRY AND HISTIOLOGY AND MATERIA MEDICA, MEDICAL BOTANY, AND ELEMENTARY THERAPEUTICS.

First Class.—None.

Second Class.—David T. Harbison, Ralph C. Brown, John A. Hawkes.

Third Class.—William H. Anderson, William J. Long.

THIRD YEAR.

SENIOR DESCRIPTIVE AND SURGICAL ANATOMY.

First Class.—George G. Nicholls; Robert A. Buntine and John Gordon equal; Grace C. Stone.

Second Class.—James H. Sleeman; Ernest E. R. Sawrey and Albert E. Sprod equal.

Third Class.—John K. Freyer, John L. Henderson; Egbert J. Connell, Edward A. Strahan and Margaret Whyte equal.

GENERAL ANATOMY AND PHYSIOLOGY.

First Class.—Ernest E. R. Sawrey.

Second Class.—James H. Sleeman, Elizabeth A. M. O'Hara.

Third Class.—George G. Nicholls, Albert E. Sprod; Paul W. Farmer and John L. Henderson equal; Edgar A. Barrett and John Gordon equal; Grace C. Stone.

FOURTH YEAR.

REGIONAL AND APPLIED ANATOMY AND PATHOLOGY.

First Class.—John R. Harris, Horace P. Godfrey.

Second Class.—None.

Third Class.—Edgar Holcroft and Garnet Soilleux equal; Caleb Joyce, Stanley S. Argyle.

THERAPEUTICS, DIETETICS, AND HYGIENE.

First Class.—Horace P. Godfrey and John R. Harris equal.

Second Class.—None.

Third Class.—Garnet Soilleux, Stanley S. Argyle.

The following exhibitions in Medicine have been awarded:—

SECOND YEAR.

Junior Descriptive and Surgical Anatomy.—Ralph C. Brown.

Physiological Chemistry and Histology, and Materia Medica, Medical Botany, and Elementary Therapeutics.—David T. Harbison.

THIRD YEAR.

Senior Descriptive and Surgical Anatomy.—George G. Nicholls,

General Anatomy and Physiology.—Ernest E. R. Sawrey.

FOURTH YEAR.

Regional and Applied Anatomy and Pathology.—John R. Harris.

Therapeutics, Dietetics, and Hygiene.—Horace P. Godfrey and John R. Harris, equal.

At the recent examinations, the following were among the papers set:—

MATERIA MEDICA, MEDICAL BOTANY, AND ELEMENTARY
THERAPEUTICS.

1. Name the officinal compounds of Bismuth, and give their preparations, doses, modes of administration, and chief uses.

2. How is Creasote obtained? Mention its chief physical properties, officinal preparations, doses, and actions.

3. Describe the source, characters, and composition of Ipecacuanha, and give an exact account of its preparations and their doses.

4. Name the principal Antipyretics in common use, and state what you know with regard to the actions of this group.

5. In what forms and doses would you administer internally Potassii Permanganas, Amyl Nitris, Cocainæ Hydrochloras, Pilocarpinæ Nitras, Resina Copaibæ, Fel Bovinum Purificatum.

THERAPEUTICS, DIETETICS, AND HYGIENE.

PAPER I.

1. Write, in full, prescriptions suitable for cases of (a) bronchial catarrh, (b) cerebral congestion, (c) gastric atony, (d) skin irritability; and state precisely what effect each prescription is intended to produce.

2. Discuss the mode of action and administration of chloroform as an anæsthetic. What are its dangers, and how would you deal with them?

3. Discuss the mode of action and uses of Carbolic Acid.

4. Discuss the mode of action and uses of Atropine.

5. Enumerate and differentiate the principal bitter stomachics.

PAPER II.

(A.)

1. Classify the main articles of diet according to their digestibility.

2. How would you peptonize milk, gruel, and beef tea?

3. Discuss the dietary of Infancy.

(B.)

1. What rules would you formulate to prevent the spread of infectious disease?

2. What are the main impurities found in drinking water, and how would you deal with them?

3. Enumerate the more important sanitary errors found in connection with many Victorian dwellings.

JUNIOR DESCRIPTIVE AND SURGICAL ANATOMY.

1. Describe the structures which enter into the formation of

(a) The shoulder joint.

(b) The sacro-iliac articulation.

2. Describe the movements which occur in the hip-joint, and name the muscles by which they are severally produced.

3. Describe the dissection necessary to expose one of the following structures, and name in order the various parts that are met with :—

(a) The rectus abdominis.

(b) The mylo-hyoid.

4. Describe the origins, insertions, relations and functions of six of the following muscles :—External pterygoid ; splenius ; flexor sublimis digitorum ; teres minor ; obliquus externus ; psoas magnus ; biceps femoris ; tibialis anticus.

SENIOR DESCRIPTIVE AND SURGICAL ANATOMY.

1. Describe the steps of the dissections necessary to expose fully the following structures, and mention in each case the relative positions of the parts successively brought into view :—

(a) The external plantar artery.

(b) The superior profunda artery.

2. Describe the origin, course, relations, branches, and communications of the hypoglossal nerve.

3. Describe the course and relations of the right common iliac artery.

4. Describe the saphena veins.

5. Describe the roots of the lungs and their relations.

6. Describe the prostate gland and its relations.

7. Describe the attachments of the capsule of the hip-joint.

REGIONAL AND APPLIED ANATOMY.

1. Describe the steps of the dissections necessary to expose—

(a) The membranous portion of the male urethra.

(b) The trachea in the neck.

Mention in order the structures seen in each dissection.

2. Describe the relations of the several parts of the heart and its valves to the chest wall.

3. Describe the collateral circulation after ligature of the femoral artery at the apex of Scarpa's triangle.

4. Describe the cutaneous nerve-supply of the upper arm and of the head.

5. Describe the movements of the hip-joint, and specify the muscles by which they are severally produced.

GENERAL ANATOMY AND PHYSIOLOGY.

1. Give the origin and microscopic structure of the Pneumogastric and Spinal Accessory Nerves.

2. What is the difference between a simple muscular contraction (Striated Muscle) and Tetanus? What is the nature of the contraction of striated muscle in the living body?
3. What are the factors which maintain the circulation?
4. Enumerate the functions of the stomach.
5. Give a short sketch of the nervous mechanism of respiration.
6. Describe the microscopic structure of the iris and cornea.
7. How is impregnation effected? How is the nutrition of the embryo effected (*a*) before and (*b*) after the formation of the placenta?

PATHOLOGY.

1. Describe the process of inflammation as studied experimentally in the tongue of a frog.
2. Describe and explain the phenomena of splenic embolism.
3. Describe the general characters and mode of development of micrococci, and mention some of the more important diseases which are supposed to be connected with them.
4. Describe the macroscopic and microscopic changes which occur in—
 - (*a*) Cirrhosis of the liver.
 - (*b*) Croupous pneumonia.
 - (*c*) Epithelioma of the tongue.
5. Describe the changes which occur in the heart and in the chief organs of the body in mitral obstruction.

FORENSIC MEDICINE.

1. What are the points to be noted in the examination, for medico-legal purposes, of the body of a new-born child?
2. To what extent is it possible by an examination of a cicatrix, to determine the date of the infliction of the wound?
3. What are the various colour-changes undergone by the skin after death, and what information is to be derived from such phenomena?
4. What general rules have been laid down for guidance in determining whether a wound has been inflicted before, or after death?
5. What are the symptoms experienced by those who die of starvation? What length of time may a healthy adult live without food? And what are the post-mortem appearances observed in the bodies of those who die of starvation?

6. Define the duties of the medical referee of an Insurance Company; mentioning specially the points to be observed in order to lessen the possibility of the policy being declared invalid, on the death of the insurer.

7. What are the usual causes of insanity? Mention them in the order of their relative frequency.

8. Give circumstantially, the symptoms and post-mortem appearances, in chronic poisoning, severally, by arsenic, perchloride of mercury, and tartar-emetic, and say with what diseases the effects of these agents are likely to be confounded.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

1. Describe the diameters, planes, and axes of the female pelvis.
2. How would you conduct a case of pelvic presentation.
3. Describe generally the varieties of extra-uterine gestation, the progress and treatment.
4. Give the causes, conditions, and treatment of amenorrhœa.
5. Describe the varieties, causes, symptoms, differentiations, and treatment of inversion of the uterus.
6. What are the needful points in the selection of a wet-nurse.

THEORY AND PRACTICE OF MEDICINE.

1. For what other diseases may typhoid fever be mistaken; and how would you make the distinction?
2. Give an account of the etiology, symptoms, diagnosis, and treatment of tonsillitis.
3. What are the chief causes, and the symptoms and treatment, of bronchial asthma?
4. What are the conditions which lead to the production of dilatation of the right ventricle?
5. What are the causes, symptoms, diagnosis, and treatment of facial (Bell's) paralysis?
6. Describe the symptoms, diagnosis, and treatment of tubular nephritis in its various stages.

SURGERY.

Fifth Year.

1. What are the causes and symptoms of fibrous ankylosis of a joint? How would you treat a knee joint that is fixed at a right angle by a recent fibrous ankylosis?
2. What are the symptoms and characteristic appearances of acute syphilitic iritis? How would you diagnose a case of this kind from one of acute rheumatic iritis?

3. Describe the symptoms of a simple oblique fracture of the femur in the upper third, and the usual position which the leg and foot assume while the patient is lying on his back. How would you diagnose fracture of the femur high up from a dislocation on the dorsum?

4. Describe the symptoms, local and general, of a severe attack of cutaneous erysipelas of the head and face. Mention the probable dangers. How would you treat the case?

5. Give the symptoms and diagnostic characters of the three following affections, in or about the tibia—

Chronic Periostitis.

Syphilitic Periostitis.

Chronic Endostitis.

6. What are the predisposing and other causes of traumatic delirium tremens? Give the symptoms and treatment of this affection.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee held on the 15th ult., letters were received from the Resident Medical Officers and the Secretary of the Medical Students' Society, referring to the statements made by Mr. Butters at the previous meeting of the Committee, to the effect that a patient had been killed by being experimented upon by four students, and asking that the matter be investigated, or the statement contradicted.

Mr. Butters said that he did not take back one word of what he had previously asserted. The incident to which he had alluded occurred, he believed, on last Good Friday. What had occurred was this:—A man had been brought in and laid upon the operating table in a filthy condition, which was simply disgraceful. This was, however, the fault of the nurse. The unfortunate fellow had been operated upon previously by two medical men outside the Institution, without any beneficial results, and when he was brought in he was treated by four young men, and any chance of his life being saved was thus thrown away. What these young men should have done, was to have sent for one of the Honorary Surgeons of the Institution. This they did not do until after their own efforts had proved unavailing, when it was too late to do anything for his

recovery. He had no desire to hurt the feelings of these young men, but rather to encourage them in their efforts to learn ; but in serious cases like that which he had referred to, they should not rely on their own efforts, but should at once send for one of the Honorary Surgeons.

Mr. A. Webster said that he would, on a future occasion, move that a committee be appointed to inquire into the condition of the Staff of the Hospital, in both the nursing and medical branches. It was generally known that the Nursing Staff in particular was in a complete state of disorganisation, and it was not creditable to an institution like the Melbourne Hospital that it should be compelled to advertise continually for nurses.

The letters were left in the hands of the President and Mr. Butters for reply.

At the ordinary meeting of the Committee of Management of the Melbourne Hospital held on the 12th inst., Dr. Molloy, the Medical Superintendent, reported the circumstances attending the death of the man James Reardon, and submitted the recommendations made by the coroner's jury. It was unanimously decided to adopt these immediately.

The President remarked that the Committee were aware of the inadequacy of the refractory ward, and had caused plans to be prepared for the erection of a new one, but were hampered in their movements by want of funds.

The Secretary (Mr. J. Williams) wrote, complaining of the conduct of certain of the nurses towards him, and asked that the Committee should take some action in the matter.

Messrs. J. M'Kean and A. Webster, who had acted as the Visiting Committee during the past fortnight, reported that all the nurses in the Institution, with the exception of two, had complained to them that Mr. Williams had not been as courteous and respectful to them since his return from England, as he had been prior to his departure. They stated that every nurse who had resigned her position in consequence of a misunderstanding which had arisen out of a published statement by Mr. Williams, had been harassed and worried ever since they had withdrawn their resignations, and that some of them had been dismissed for trivial mistakes.

Mr. M'Kean, who submitted the report, said that the complaints had been made without any undue interrogation on the part of himself or Mr. Webster, and were so universal amongst the nurses that he felt that, in the interests of all concerned, a searching

inquiry should be made into the charges, and the cause of the friction discovered if possible.

The President stated that on the frequent occasions on which he had visited the Hospital, he had never heard any complaints from the nurses. He had certainly never questioned them on the subject, but he had given them ample opportunity of unburdening themselves to him. He could, however, assure the Committee that the reason given to him by Mr. Williams for the dismissal of the nurses who had left the Institution, were good and sufficient, and justifiable reasons.

After a lengthy discussion, a Select Committee consisting of the President, the Vice-Presidents, the Treasurer, and Messrs. G. Godfrey, D. Willder, C. T. Plunkett, J. C. Winn, and T. W. Moffat, was appointed to inquire into the case, and will sit on the 15th inst., at 3 o'clock, to hear evidence.

Dr. G. T. Howard was appointed Honorary Physician to the out-patients, in the place of Dr. Bage, who has resigned.

An inquest was held at the Hospital by Dr. Youl, on the 12th inst., on the body of James William Reardon, the patient who died on Saturday night while under treatment for delirium tremens, having shortly before been assaulted by a fellow-patient.

Professor Allen deposed that he made a post-mortem examination of the deceased on the 11th inst. There were numerous scratches on the body, and a contused bruise on the nose, as well as other portions of the face. The nose was fractured. The vital organs of the body were in a very bad state. The cause of death was chronic alcoholism and blood poisoning, owing to the inability of liver and lungs to perform their functions. The external injuries described might have hastened by a few hours the deceased's death, which was certain in any case, and must have happened quickly. The inflammation of the lungs, which so regularly preceded death in these cases, was in progress when the assault took place.

The evidence of the House Surgeons showed that the patient had been admitted in a very low state, suffering from delirium tremens, on the 7th inst. He was assaulted by another patient during the night of the 9th inst., and died several hours afterwards. The patient who assaulted him was supposed to be convalescent. No "restraint" book was kept.

James Williams, Secretary of the Hospital, stated that the refractory ward consisted of three rooms, with two beds in each. There was only one nurse in attendance, except when there was a

special case. There was no "restraint" book kept. The want of funds prevented a proper refractory ward from being built.

The Coroner, in addressing the jury, said there could be no doubt that the man died from alcoholism, but his death might have been hastened by the assault which was made on him. The result of this man's death being hastened through the bad management of the Hospital, would perhaps be an improvement which was very much wanted. The refractory ward of the Hospital was utterly unsuitable. It was also highly improper that patients should be placed under restraint without a record of the circumstances, and that they should be left to the care of a female attendant. Men suffering from delirium tremens were liable to be seized with a frenzy, and become violent in a moment, and a female attendant was in absolute danger of her life. Had this particular attendant interfered with the two men, and the deceased been a little stronger, she might have been killed by the two of them. It was downright cruelty to put a man in delirium tremens under restraint, as it was fright that made him violent, and the restraint only increased the mischief. Such patients should be placed in separate wards.

The jury returned a verdict to the effect that the deceased died of alcoholism, adding a rider condemning the present refractory ward at the Hospital, and advising that two male attendants should be placed in charge of patients suffering from delirium tremens.

An inquiry was commenced on the 13th inst. by a Select Committee, at the Melbourne Hospital, into a complaint made by the Secretary as to the conduct of certain of the nurses towards him.

Mr. G. Godfrey was elected Chairman of the Select Committee. At the request of Mr. Williams, a clerk was appointed to take notes of the proceedings.

The Chairman read the complaint of Mr. Williams and a report of the Visiting Committee, which had given occasion to the inquiry.

Mr. J. Williams stated that on September 20, in conversation, Mr. Webster referred to a paragraph on the appointment of matron, and remarked on the disorganisation in the Hospital, and his (Mr. Williams') domineering conduct to the nurses. Mr. Webster seemed very excited, and made a threat, which he afterwards withdrew. He desired the present inquiry because of what was said at the Finance Committee meeting last Friday,

that the Hospital was in a state of disorganisation, and that he was domineering in his treatment of the nurses.

In reply to Mr. F. R. Godfrey, Mr. Williams said that the report of the Visiting Committee was not prepared in the usual way, and it was not expected by him when it came up. Inquiry was made by the Committee as to the letters of resignation received from the twenty-nine nurses who, after tendering their resignations in April last, withdrew them on an explanation of Mr. Williams' statements at the time. These letters had been returned to the nurses, but a list of the names of the nurses was ordered to be laid before the Committee.

Evidence was then called for from the eight nurses who had complained to the Visiting Committee on Monday, and all of whom had tendered their resignations in April last. The evidence was much the same in all cases. They complained that the Secretary did not treat them with sufficient respect, and that he was overbearing in his manner towards them. He was in the habit of calling them by their surnames, instead of addressing them as "Nurse." They also felt unsettled. Some of them stated that at times the work was too hard; others, that the food was badly cooked, and badly served.

Mrs. Miller, matron of the Hospital, who had been there a little over three months, said that Mr. Williams had spoken to her about one of the previous witnesses, and she had spoken to her, but had not observed any rudeness in her manner, and she considered her very suitable for the Hospital. There had been great dissatisfaction since Mr. Williams' return. She considered that he pried too much into matters which she thought should be under her control, namely, the management of the female department. The matter of the food might be amended. She had not been present when Mr. Williams had spoken to the nurses, so she could not say if there were anything in his manner to which they could take exception; but her authority was very much ignored. It was not her duty to deal with the food supply without the Secretary, though she received complaints on the subject. She thought complaints should be made through her to the Secretary. Strict discipline should be maintained amongst the nurses. Six nurses had left since she had been in the Hospital. She used the term "Nurse" in addressing the nurses. During the time she had been there, there had been no serious complaint about the nurses, and none from the doctors. In answer to Mr. Williams as to the dismissal of a housemaid, she said it was on account of

a quarrel with another servant. Mr. Williams dismissed both, but she was very sorry to lose them.

THE NEW CONVALESCENT HOME FOR WOMEN.

The new building of the Melbourne Convalescent Home for Women, which has been erected at Clayton's-road, on the Gippsland line of railway, fifteen miles from the city, was formally opened on the 1st inst. by His Excellency the Governor. The home is pleasantly situated on rising ground, close to the station. It is nicely fitted up, and there are several small wards for paying patients. Altogether, there will be accommodation for about forty inmates. Children under twelve years of age, or women recovering from infectious or contagious diseases, or labouring under any form of disease requiring active treatment, are not taken in.

HOSPITAL SUNDAY.

The Hospital Sunday collections for the present year, which were made on Oct. 27 throughout Melbourne and suburbs, show a serious falling off, as compared with those of last year, which, however, might be considered abnormal. The contributions acknowledged on Oct. 28 amounted to £5505, exclusive of Hospital Saturday collections, as against £9200 similarly acknowledged last year, and it is apparent that the falling-off from last year will be at least £3000. This is due, of course, in a great measure to the very unseasonable weather that was encountered, it having rained heavily during the greater part of the day. The outdoor collections had mostly to be abandoned, and in many churches the collections were postponed.

The secretary of the Melbourne Hospital has received the following contributions from the "See Yup" Chinese residents of the city :—

Melbourne Hospital...	...	...	£87	15	0
Alfred Hospital	...	...	25	0	0
Benevolent Asylum	...	...	40	0	0
Eye and Ear Hospital	...	...	20	0	0
Children's Hospital	...	...	3	3	0
Austin Hospital	...	...	6	6	0
Increased Hospital Accommodation	...	...	10	10	0

£192 14 0

Vital Statistics.

The Government Statist's report on the vital statistics of Melbourne and suburbs for September 1889, shows that the births of 1452 children—728 boys and 724 girls—were registered. The deaths registered numbered 642, viz., 373 males and 269 females. The births thus exceeded the deaths by 910, or 142 per cent. To every 1000 of the population of the district, the proportion of births registered was 3·32, and of deaths 1·47. One hundred and thirty-four deaths, or 21 per cent. of the whole, took place in public institutions. The number of children under one year who died was 143, the total number under five years being 222. The mortality from typhoid fever was lower in the month under notice than it had been in any month since October 1887, and lower than in any September since that of 1885. Deaths from diphtheria, however, exceeded by 1 the number in August, and were, moreover, more numerous than in any other month of the present year except July. Deaths from whooping cough numbered 22, as against 19 in August. Seven deaths were set down to the consequences of childbirth, or 1 death of a mother to every 207 births registered. In addition to the deaths from diphtheria referred to in the last column of the following table, 7 deaths were set down to diphtheritic croup in the month under review, 8 in August, and 16 in July.

The following is a statement of the deaths set down to typhoid fever and diphtheria in each of the first nine months of the present and two previous years :—

MONTHS.				TYPHOID FEVER.			DIPHTHERIA.		
				1887	1888	1889	1887	1888	1889
January	..	..	..	40	39	70	1	5	15
February	..	..	..	70	63	64	4	2	13
March	..	..	..	59	54	91	3	13	18
April	..	..	..	57	43	113	6	13	26
May	..	..	..	40	32	92	10	19	35
June	..	..	..	15	20	36	7	16	30
July	..	..	..	15	12	17	9	14	48
August	..	..	..	9	9	16	7	11	36
September	..	..	..	7	9	6	7	11	37
Total ..	..	..	..	312	281	505	54	104	258

Correspondence.

To the Editor of the Australian Medical Journal.

SIR,—In reply to Mr. Syme, I never imputed to him ignorance of, but merely want of familiarity with, Spencer Wells' experiments. (I think the difference can be seen without defining the words). My reason for so thinking was his statement, that the inversion of the peritoneum was not a rational proceeding. To me there seems a "sweet reasonableness" about the experiments sufficient to convince most people. Of course, I was aware that the experiments referred to the peritoneum covering the parietes of the abdomen, but as this does not differ structurally from that covering the viscera, there would be good *a priori* grounds for believing they would both behave in the same manner after inversion, even if we had not Madelung's experiments on this very point. Mr. Treves points out that, in operations on the human subject, surgeons generally use an insufficient number of sutures, or do not pay proper attention to details. There can be no doubt but that these are the most frequent causes of failure. In dealing with the peritoneum inverting the viscera, Lembert's method, which I believe is nearly always followed after a fashion, has a sound pathological basis, and if carefully carried out, ought I think to be superior either to everting the peritoneum, as Mr. Syme suggests, and thereby courting adhesions of neighbouring structures; or to making an effort, which would be in the vast majority of cases fruitless, of getting the cut edges of the peritoneum in accurate contact, and keeping them there. Mr. Syme says serous surfaces will not unite unless inflamed, and seems to be afraid that perfect antisepticism may be the cause of non-union. I think if there are a sufficient number of stitches, not too loosely tied, that their irritation will more than neutralise any antiseptics we know at present.

Living at such a distance from a medical library, I am unable to look up any of the published cases of Simon's operation, but I think that the experiments of Wells and Madelung, and the operations of Lembert, Treves, and innumerable other surgeons, furnish a cloud of witnesses to the rationality of inverting the peritoneum, and I do not think Mr. Syme has made out a good case for his suggestion.

I am, yours, &c.,

Donald, October 31, 1889.

H. H. FLEMING.

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentleman has registered his qualifications:—Lionel Selfe Wells, Maldon, L. et L. Mid. R.C.P. et R.C.S. Edin. 1889, L.F.P.S. Glas. 1889. Additional qualification registered:—No. 1009, George A. Syme, Melbourne, Ch. M. Melb. 1888. Name of deceased medical practitioner erased from the Register:—No. 866, James M. Nolan, L.R.C.S. Irel.

HEALTH OFFICERS.—The following appointments have been confirmed:—Snowy River, Buchan, and Bendoc Biddings of the Shire of Tambo—James Kerr M.B.; Shire of Healesville—J. Chalmers Baird, M.B., *vice* W. Kilpatrick, M.B., resigned; Shire of Phillip Island—Samuel Wilson, M.D., *vice* C. W. Rohner, M.D.

PUBLIC VACINATORS.—The following appointments have been made:—Kyabram—James Frederick Merrillees, M.B., *vice* J. W. Brett, M.B., whose resignation has been accepted; Toongabbie—Denis Paul O'Farrell, L.R.C.S.

John Francis Molyneux, M.R.C.S. Eng., Williamstown, has been appointed an Additional Certifying Medical Practitioner.

VICTORIAN MILITARY FORCES.—George James Hodgson has been appointed Surgeon, with the relative rank of Captain, to the Medical Staff, Unattached List.

Dr. G. A. Syme has been appointed by the Chief Secretary as medical officer to the police hospital, the position having been rendered vacant by the resignation of Dr. F. T. West Ford. The salary attached to the position is £400 a year, exclusive of fees. There were forty applicants, and Mr. Deakin at first referred the applications to Dr. M'Crea, Dr. Shields, and Dr. Dick for report. These gentlemen reduced the number to three, whom they considered most qualified for the position, and out of these three, Mr. Deakin selected Dr. Syme for the appointment.

Mrs. Emilie Kate Thomson, the wife of Dr. Barclay Thomson, of South Yarra, died on the 25th ult. under very painful circumstances. During the previous evening, she was suffering very severely from internal pains, and frequently asked her husband for something to give her relief. He applied different remedies without succeeding in alleviating the pain, and at length she became so much affected that he gave her some chloroform to inhale. She had twice previously taken chloroform without serious results; but after she had taken it on this occasion, her husband became alarmed when he saw that she was developing grave symptoms. He did all in his power to revive her, and summoned Dr. C. L. Lempriere to his assistance, but before the latter gentleman arrived Mrs. Thomson had expired. The matter was reported to the coroner, and in the afternoon an inquest was held by Dr. Youl. Drs. Maudsley and Lempriere, who made the post-mortem examination, stated that the heart was weak, and that death was due to the failure of its action, caused by the inhalation of chloroform. The chloroform, in their opinion, had been properly administered, and a verdict to that effect was recorded. The deceased lady was only 25 years of age.

A case believed to be one of small-pox has been discovered at North Adelaide, the patient being a passenger named Parker, who arrived by the M.M.S. Yarra on the 7th inst. Dr. Verco gave an opinion that the symptoms

were those of small-pox, and the Central Board of Health arranged that the man should be transferred to the Quarantine Station on the morning of the 9th inst., the house and its inmates at North Adelaide being isolated. Parker came out with his sister as a second-class passenger. He occupied a cabin with a patient who joined the steamer at Marseilles. Two days after passing the Seychelles, the Marseilles passenger became ill. The surgeon isolated him, and vaccinated those on board the steamer. The patient soon got better, and the danger being over, the vessel was awarded *pratique* at Albany and Adelaide. Parker, on leaving the vessel, seemed to be pretty well, but on the 7th inst. he showed signs of an eruptive disease.

Dr. Shields, Chief Medical Officer of the Government, on the 9th inst., made further inquiry into the case of the passenger, who was landed from the *Messageries Maritimes S.S. Yarra* on the previous day, after having suffered from an eruptive disease. Dr. Shields visited him, and found what in his opinion necessitated his immediate removal to the Sanatorium at Cut-paw-paw, and this was effected the same afternoon. All the clothing and personal effects which the patient had worn or used during the voyage were also taken to the Sanatorium, where they will be thoroughly disinfected. The passenger joined the Steamer *Yarra* at Marseilles, and on October 21, according to the report of the surgeon, Dr. Bos, he developed an eruptive disease of a dubious character. He was immediately and strictly isolated, and everybody on board re-vaccinated. The eruption sprang up and healed in nine days, without fever or any general symptoms. Dr. Bos reported the case to Dr. Toll, the Health Officer at Adelaide, as one of chicken-pox, and Dr. Toll also examined the patient, and was of opinion that he had recovered from what appeared to be chicken-pox. The vessel was granted *pratique* at Adelaide; but a different complexion was given to the case, when another passenger who had landed from the *Yarra* at Adelaide, was found on the following day to be suffering from a disease which, in the opinion of Dr. Verco, the President of the Central Board of Health, who examined him, was small-pox. The two passengers occupied the same cabin during the early part of the voyage. The President of the Central Board of Health, Melbourne, was informed briefly of the facts by telegram, and he gave instructions to Drs. Figg and M'Lean, to make a strict examination of the passengers on the arrival of the vessel at Melbourne. The officers came to the conclusion, after making inquiry into the case, that there was nothing to warrant interference with the clearing of the vessel, or the refusal of *pratique*, and the passengers were allowed to land in the usual way. Mr. Akehurst, the President of the Central Board of Health, and Dr. Shields, are of opinion, from the reports that have reached them from Adelaide, that the patient who is quarantined there is suffering from a mild form of small-pox, and as there appears to be little doubt, from the reports obtained by the Adelaide Board of Health, that he contracted the disease from the Melbourne patient, they deemed it necessary to take the precaution of sending him to the Sanatorium. There were fifty other passengers landed from the Steamer at Melbourne. Mr. Akehurst communicated with the Police, and asked that inquiries should be made regarding these passengers. Upwards of thirty of them have already been traced, and after being examined by the Medical Officers of the Boards of Health in the places where they reside, have all been pronounced free from any disease. The vessel has since proceeded to Sydney, and has been put into quarantine there.

At a meeting of the Central Board of Health on the 18th ult., it was resolved that the Board should endeavour to impress upon the Government the necessity for passing the Amending Health Bill during this session of Parliament. In accordance with that resolution, Mr. A. P. Akehurst has addressed a letter to the Chief Secretary, pointing out that the whole question of the health of the colony is in a very unsatisfactory position, and must remain so until increased powers are given both to the Central and Local Boards of Health to enforce measures of sanitation and isolation. It is further urged that the typhoid season is now approaching, and apparently with great virulence, and that the Boards have no power to provide for the isolation of cases of this disease, nor in cases of diphtheria, which are even more fatal in their results. It is therefore submitted that the session should not be allowed to close without the necessary changes in the law being effected.

Mr. Deakin, in his defence and explanation of the Health Bill, in the Legislative Assembly, pointed out that "filth," or preventible diseases, such as typhoid fever and diphtheria, are working much havoc among our population, and by way of bringing the urgency of the matter vividly before the minds of members, he quoted a few sentences from a letter from the Government Medical Officer to the effect that in a few months hundreds of young people now in health will be in their graves. Parliament had a responsibility which it could not evade, and unless the health law were amended, it would be impossible to check the spread of disease. For the ten months ended on the 16th inst., 5750 cases of typhoid fever had been reported, and there had been 645 deaths. In the Bill, the Government proposed to abolish the Central Board of Health as an executive body, and substitute a department of health under a Minister, who would be responsible to Parliament. The Central Board of Health would then be a board of advice.

The invitation of the Mayor of Melbourne to the mayors and presidents of the metropolitan municipalities to a conference on the Health Bill, was responded to by sixteen out of the twenty-three gentlemen to whom letters were sent. They met on the 30th ult., in conjunction with the members of the City Council, and heard a statement from Alderman Stewart as to the amendments which it was possible that they would succeed in having made to the Health Bill, in order that the desire both of the Government and of the municipalities to have an amended law, might be given effect to without friction. The main point suggested was that the Central Board should be so constituted as to include representatives of the municipalities, and that it should administer the health law subject to the ultimate power being in the hands of the Minister of Health for the time being. Alderman Stewart and the Mayor of Melbourne were authorised to continue negotiations with the Chief Secretary, with a view to the matter being satisfactorily settled, and the Bill being proceeded with. These two gentlemen had an interview with the Chief Secretary later in the day, and Mr. Deakin expressed great satisfaction with what had been done, and hoped the conference would lead to a speedy settlement of the question. One thing the Government must insist upon was, that the Central Board must be a small one, and must be presided over by the sanitary inspector, who was to be obtained from England, and who was to be the chief professional adviser of the Government on all matters connected with the public health. The Chief Secretary

requested Alderman Stewart to make his amendments to the Bill in writing, and submit a statement of his propositions.

At the meeting of the City Council held on the 4th inst., the Health Committee sent in a report, stating that their attention had been called to two systems of treating nightsoil in operation in Sydney and Newcastle, and recommending that the City Surveyor be deputed to visit those cities for the purpose of reporting as to the expediency or otherwise of adopting either principle for use in this city. The recommendation of the Committee was adopted, and the Health Officer (Dr. Jamieson) was appointed to accompany the City Surveyor to Sydney and Newcastle.

The report of Captain Evans, inspector of charities, with regard to the charitable institutions of the colony for the year ended June 30, 1889, has been presented to Parliament. Out of sixty-six institutions, Captain Evans has inspected forty-seven. He states that the institutions are, as a rule, well conducted. There is much dissatisfaction as to the distribution of the Government grant, and the oft-repeated suggestion for the raising of funds for the support of charities by means of municipal grants seems to be growing in favour. At Nhill and Horsham, arrangements have been made whereby a certain amount of rates is set apart for the hospital, and this system has worked very satisfactorily. There are still many cases of imposition on charities, and it is urged that systematic inquiry should be made into all cases admitted to charitable institutions or relieved by them. In the opinion of the inspector, it is doubtful whether the increased hospital accommodation movement has not been overdone. Instances are given in which the benevolent asylums are imposed upon, and it is suggested that, to check this, these institutions should keep in touch with one another, as patients discharged from one are admitted into another without question. It is also suggested that the Government might consider whether it would be possible to propose a law to compel unnatural relatives to bear their proper burdens, for there are many cases in which the inmates should be wholly or in part supported by near relatives. The Government is urged to check the practice which still continues at some of the institutions, of adding year by year to the endowment fund the interest derived from that source. Hospitals are still hampered by having to keep cases which are more properly subjects for asylums, and beds are occupied which are needed for the treatment of those suffering from acute disease. It is noted that the Ballarat Hospital has adopted a female nursing staff, and the nurses are kept distinct from housemaids—a distinction which should be followed elsewhere. There has been an improvement in the status of nurses in Melbourne, but there is room for a much greater advance in this direction. The Melbourne Hospital should institute a regular course of training, and make life as pleasant for the nurses as is possible, consistent with the work, as the better and more refined the nurse, the better for the patient. The Orphanage at Brighton is the only one where the boarding out system is adopted, though at the St. Vincent de Paul's Orphanage, the experiment is being tried in the case of very young children, and the results are satisfactory so far. It has been shown that parents are opposed to the system, and that some children are withdrawn from the control of the Orphanage in consequence of it. This shows that if the system were adopted, there would probably be a large reduction in the number of those placed in such institutions. There are a large number of healthy foster homes

available, and no institution can take the place of a home. Children sent to foster parents in the country will naturally take to a country life, and on all grounds the system should be encouraged. All experience shows that it is infinitely preferable to the barrack system. The kindness with which the children in the Orphanages are treated is undoubted, but the children boarded out stand in marked contrast to those who have been confined to a playground.

BIRTHS.

CULLINAN.—On the 5th ult., at Wangaratta, the wife of Ralph Cullinan, surgeon, of a son.

LEMPRIERE.—On the 19th ult., at Pelham, Toorak Road, South Yarra, the wife of C. L. Lempriere, M.B., C.M., of a daughter.

SMITH.—On the 3rd inst., at Casterton, the wife of Dr. Charles Smith, of a son.

TUTHILL.—On the 29th ult., at Euroa, the wife of Dr. John Tuthill, of a daughter.

MARRIAGES.

BEAN—HARKER.—On the 2nd ult., at the Albert Street Baptist Church, Harold Knowles Bean, M.D., B. Sc., of Heidelberg, to Lucy J., eldest daughter of the late Calvert Harker, of Alexandria.

GRAY—SMITH.—On the 23rd ult., at St. John's Church, Toorak, by the Rev. J. Brodie Armstrong, M.A., Thomas Gray, M.B. Ed., New Norfolk, Tasmania, to Edith Margaret, fourth daughter of the late Captain Alexander John Smith, Royal Navy, Langley, Victoria.

MOLLISON—SMITH.—On the 23rd ult., at Christ Church, Hawthorn, by the Rev. H. E. Taylor, Crawford Henry, eldest son of Crawford Mollison, Windsor, to Emily Beatrice, second daughter of James Smith, St. James' Park, Hawthorn.

THWAITES—PATON.—On the 3rd ult., at Yabba, near Tallangatta, by the Rev. J. Patterson Johnstone, S. Thwaites, M.B. et B.S., eldest son of James Thwaites, Esq., Tatonga, to Katie, eldest daughter of Archibald Paton, Esq., Yabba.

DEATHS.

BOYD.—On the 16th ult., at her residence, View Point, Annie, the beloved wife of James Boyd, M.D.

FLETCHER.—On the 29th ult., at Holcombe House, Lygon Street, Carlton, Emma, the beloved wife of Dr. E. Fletcher, aged 60 years.

MOORE.—On the 11th inst., suddenly, at Collins Street East, Grace Evelyn, the infant daughter of Dr. W. and Grace Moore, aged 7 months.

SCHIELS.—On the 12th ult., Arnim Friedrich Denker Schiels, son of the late Dr. Schiels of Rutherglen, aged 7 months.

STEVEN.—On the 6th inst., at Burwood Road, Auburn, Sibyl Mary, beloved infant daughter of Dr. Alex. and Alice Steven, aged 11 months.

THOMSON.—On the 24th ult., at Garroch, South Yarra, Emilie Kate, wife of Dr. M. Barclay Thomson, and youngest daughter of the Hon. Thomas Dowling, Jellalabad, Darlington, in her 25th year.

Contributors of Papers to the *Australian Medical Journal* can have copies re-printed in pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal

DECEMBER 15, 1889.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, DECEMBER 4TH, 1889.

(Hall of the Society, 8 p.m.)

The President (Dr. BALLS-HEADLEY) occupied the chair, and there was a fair attendance of members.

The minutes of the preceding meeting were read and confirmed.

The SECRETARY then read a letter from Dr. Hooper, the Honorary Physician to the Convalescent Home for Women at Clayton's Road, stating that the Home was quite unsuitable for advanced cases of phthisis, and the Committee had decided not to take in such cases in the future.

The following gentlemen were elected ordinary members of the Society :—Thomas Cochrane Anderson, M.A., M.B., C.M. Aberdeen, of Footscray, proposed by the President, seconded by Dr. J. W. Barrett. James Hutcheson Pestell, L.R.C.S.E., L.R.C.P.E., L.F.P.S.G., of Kyneton, proposed by Dr. Duncan, seconded by Dr. Williams. N. O'Donnell, M.B. Melb., of Victoria Street, North Melbourne, proposed by Dr. Williams, seconded by Dr. J. W. Barrett. George Alexander Webster, M.B. Cantab., M.R.C.P.L., of Toorak Road, South Yarra, proposed by Dr. Davenport, seconded by Dr. J. W. Barrett.

The PRESIDENT stated that Dr. Bowen had written to the Secretary, resigning his position as Treasurer of the Society. A vote of thanks to Dr. Bowen for his valuable services to the Society, proposed by the President, and seconded by Dr. Neild, was carried unanimously.

The PRESIDENT moved, and Dr. Neild seconded, a motion empowering Professor Allen to represent the Society during his forthcoming visit to Europe and America, which was carried unanimously.

Previous to the nominations of office-bearers for 1890 being given in, the President announced that Professor Allen, the Senior Vice-President, was unable to stand for the office of

President, as he was about to visit Europe, and would be absent for a year. Dr. Hinchcliff, the Junior Vice-President, was then asked to allow himself to be nominated, but he stated that he was unable, as he had made such professional engagements as would prevent him from attending the meetings regularly. After careful consideration, the Committee had decided to ask Dr. Jackson to allow himself to be nominated, and he had consented.

Professor ALLEN expressed his regret at being unable to accept the high office of President at the present time.

The nominations of office-bearers for 1890 were then received, Drs. Jamieson and Le Fevre acting as scrutineers.

The following paper was then read :—

CASE OF MIDDLE EAR DISEASE TREATED WITH PILOCARPIN.

By W. ATKINSON WOOD, M.B., B.S.

R. M., æt. 47, has been very deaf since an attack of inflammation of the lungs twenty-five years ago. There has never been any pain in, or discharge from, his ears, but the deafness has increased slowly, surely, and equally in both ears. During the last twenty years, he has been treated in many ways, and his case diagnosed as several different lesions ; but only once, about fifteen years ago, was any good ever done for him, when a blister was put at the back of his ear, and he heard slightly better for a day. He is now quite incapable of taking part in any conversation, but can hear when he is shouted at.

On examination, can just hear tuning-fork with both ears, better with right ; cannot hear his watch tick with either. When the tuning-fork was placed on the skull, the sound was greatly intensified, showing the trouble to be in the middle ear.

To test the perceptive power of the internal ear, the tuning-fork was sounded, and held lightly between the finger and thumb on the bridge of the nose ; the patient heard the sound about three seconds longer than I felt the slightest vibration. On the left mastoid, he heard it about four seconds longer. On the right mastoid, he heard it exactly as long as I felt the vibrations.

In a normal case, when sound is conducted to the internal ear through the skull bones, the vibrations find their way out backwards, so to speak, vibrating the ossicles and tympanum ; but if the bones or the tympanum are fixed, the vibrations are thrown back on the internal ear, and so the sound is intensified.

In this case, there was more obstruction in the left middle ear than in the right, because he heard the tuning-fork four seconds longer in the left ear. So we can expect him to have better hearing in the right ear, as there is less obstruction; and so we find it.

On examining the tympanum, the left was slightly cloudy, but the handle of the malleus easily seen, and the triangular spot of light normal. The left membrane was immovable when tested with Siegel's pneumatic speculum. The right meatus contained some wax; when this was removed the tympanum was found to be in the same condition as the left, but slightly movable. The Eustachian tubes were pervious.

The diagnosis is that the mucous membrane of the middle ear is sclerosed, producing more or less ankylosis and immobility of the ossicles. The history of gradual onset, and the absence of all pain or discharge, point to this condition.

To give the treatment a trial, I advised him to take a week's holiday, as I was not sure of the effect the pilocarpin would have on him, my only previous experience being an alarming one after injecting one-third of a grain.

July 9.—I injected into the arm five minims of a 1 in 50 solution, *i.e.*, one-tenth of a grain of Burroughs, Wellcome and Co.'s pilocarpin. Other preparations do not always act, but I can say I have never found the above to fail.

July 10.—Seven minims of the same solution injected. A slight perspiration noticed a few minutes after.

July 11.—Eight minims injected. A tingling felt down the arm a few seconds after the injection, and a profuse perspiration five minutes after.

July 12.—No injection, as he must go to town. Did not seem inclined to go on with it, as there was no improvement.

July 13.—When at dinner at his hotel, he distinctly heard the pot-boy ask "What to drink," a thing he had never heard before, although he had dined at the same place for many years. He also heard the masons chipping stone outside, which was quite a new sound to him. Then he tried his watch, and could hear the back of it ticking at his right ear, a thing he had not heard for over twenty years. He could not hear the front of the watch, nor could he hear it at his left ear. Injected seven minims more of the 1 in 50 solution.

The toxic effects are now much more marked, and ensue quicker. In a few seconds a numbness and tingling are felt down the arm to the fingers. In thirty seconds a fulness is felt, first in the head, and then all over the body, with roaring in the ears, during which he seems to hear better. The same roaring is produced after a glass of whisky, but he does not hear so well with that. The saliva pours out of his mouth, and, last of all, the whole skin bursts out into a profuse perspiration, and he feels cold for several hours after. This has been the order of the symptoms after every injection, the most unpleasant part being the increase of saliva. This improvement was after the fourth injection.

July 14.—Eight minims of the 1 in 50 solution were injected.

July 16.—Seven minims injected.

July 19.—Three days since the last injection, and still hears the watch ticking at the right ear; also hears a few ticks at a time at the right temple; also at the nose, and gets occasional ticks at the left ear; so that the hearing since the last injection has decidedly gained ground, which his family have noticed markedly.

July 23.—Hearing still continues the same. Injected seven minims.

July 27.—Intermittent hearing with left ear more marked. Can also hear the front of the watch at the right ear.

August 4.—In a great fright last night, could not hear watch; but found it had stopped. Injected six minims. Still improving. Can now hear the low spoken voice.

August 13.—Improvement holds good. Injected seven minims.

On August 20 and 28, one-sixth of a grain was injected. Since then, no injections have been used.

Dr. W. Rosegarten, of Kiel, undertakes no case that cannot submit to treatment for six weeks. In some cases a distinct redness is seen in the mucous membrane of the middle ear, in about thirteen minutes, which gradually fades. His theory is, that the secretion of the middle ear is increased, and the dry and hardened mucous membrane rendered more pliable, and more capable of vibrating.

Bearing in mind the hyperæmia, accompanied by increased secretion, I thought that nitrite of amyl might produce the same effects, and it or nitro-glycerine would be much less trouble to administer, as the patient could take them by himself. Negative results ensued, and as I was afraid of inducing an artificial apoplexy, I let well alone.

As the hearing was gradually returning, he would hear the watch ticking for a second, and then he would lose it again from ten to twenty seconds, and then hear it again. Lauder Brunton has described a capillary pulsation, which recurs about every twenty seconds. This, I think, would account for the intermittent hearing, which would be at its best at the increased tension. As the hearing improved, the intermittency passed off, but the first sign of hearing was always intermittent.

Last evening I went to see the patient, particularly to examine the mobility of the drum, and found it markedly increased, the patient himself remarking that he felt it move when the air pressure was increased, with Seigel's speculum, which he never did before. He is still improving gradually, even since the discontinuance of the injections, and can now often hear an ordinary conversation.

If we are to study the action of pilocarpin, each case should be reported fully. Cases are injected with pilocarpin without any previous examinations of the ears, and if one of these should prove successful, we should be none the wiser as to what cases it is useful in. A definite diagnosis should be made, putting empiricism out of the field as much as possible, and in this manner we may hope ultimately to arrive at its real action, and treat our cases rationally.

In reply to Dr. Barrett, Dr. Wood stated that the patient heard a watch on contact on the left side, and at a distance of an inch on the right.

Dr. KENNY said that Dr. Wood's case was very interesting, for if it really was a case of sclerosis, it was a great advance to have anything that would cause improvement in the hearing. But Dr. Wood's description of the case was somewhat deficient. There was no description of the state of the tube, or of the throat. Politzer had used pilocarpine long for labyrinthine disease, but its use in middle ear affections was of very recent date. There were several drawbacks to its use. It was necessary to keep the patient in bed, if the drug be used hypodermically, which is the more efficient method, though it is sometimes given in a pill. On one occasion he gave a man $\frac{1}{4}$ gr., and sent him home; he developed alarming symptoms, vomiting, &c. In another case, there was great swelling of the salivary glands.

Dr. BARRETT said that he was greatly interested in Dr. Wood's paper, as he would be glad to know of anything that would do

good in such cases as the one recorded. During the last six months he had used very large quantities of pilocarpine, but he had not trusted to it alone, but had used some form of passive motion with it, as such cases were really analogous to cases of anchylosed knee-joint. You cannot expect the pilocarpine to break down adhesions any more than you could in a knee. If the effect is only temporary, it might be explained by the great vascularity induced, causing the sensations to be greatly exaggerated. If the improvement be permanent, it may be that, in such cases, portions of effused lymph have been absorbed. He had seen no ill effects from the use of the drug. He used injections of $\frac{1}{10}$ gr. almost daily in his office, and patients do not need to go to bed after it. In some cases, there had been improvement. Dr. Wood was to be congratulated in having treated a case of sclerosis of the middle ear, in a person 47 years old, with success.

Dr. Wood in reply, stated that he had passed the Eustachian catheter, and found both tubes clear. There was nothing abnormal in the condition of the throat. The patient had never suffered from tinnitus. He used to give the injection at about seven o'clock in the evening, the patient used then to remain in the house, but went to his business in the day time. Passive motion by means of Seigel's pneumatic speculum was practised twice a day by the patient himself. The marked improvement was in the mobility of the tympanum afterwards, compared with the immobility at first. As to dose, on two or three occasions he used $\frac{1}{3}$ gr., several times $\frac{1}{4}$ gr. The increased flow of saliva was the most unpleasant result.

The following paper was then read :—

A CASE OF PNEUMONOMYCOSIS — ABSCESS OF LUNG, FOLLOWED BY GANGRENE — DEMONSTRATION OF FUNGUS AND BACTERIA.

By J. B. Ross, M.D., late of Macarthur, Victoria.

Gangrene of lung and abscess of lung are of sufficiently rare occurrence to warrant recording. Laennec states that, during a period of more than twenty years, amongst several hundred of post-mortems, he only saw five or six cases as the result of pneumonia, which is believed to be the most common cause of abscess. Other causes are—pyæmic emboli, injuries of chest, and foreign bodies in the lung. Emboli derived from pyæmic or

puerperal processes, &c., generally cause multiple abscesses in lung, &c., and gangrene. Injuries to the chest, such as penetrating wounds, falls on the side, knocks, &c., mostly cause gangrene. The same holds good in cases of foreign bodies, such as cherry stones, corn ear, pieces of bone, inspired sloughing parts, particles of food, and so on.

As far as my knowledge goes, the case I have to report stands unique in medical literature. In this instance, the abscess was caused by a foreign body in the bronchial tubes. A fungus was discovered during life in those "plugs" which are considered by the best authorities to be formed in the bronchi. Furthermore, staphylococcus was seen in the same slides—a reliable proof of there being an abscess. The impending gangrene was predicted by the simultaneous appearance of bacteria of putrefaction. Vegetable parasites have been occasionally found in the lung. They are represented by actinomyces, aspergillus, mucor, oidium and sarcina. For reasons mentioned later on, sarcina, actinomyces and mucor are out of the question. Aspergillus (of which there are ten varieties) has been found nineteen times in the lung, but only seven times out of that number during life.—("Popoff. Baumgarten's Jahresbericht," 1887; "Hertz V. Ziemssen's Handbuch," V.B. ii).

Oidium has been seen only three times, but once only has it been discovered during life in the sputum of a patient suffering from putrid bronchitis.

As you know, the different species of fungus are determined by their characteristic fructification organs. The scientific way to classify any fungus found is to grow it artificially. This was not practicable in my case, and I had therefore to rely entirely on the examination of my slides.

Of the different fungi, only two come under consideration, viz., aspergillus and oidium. My first impression was, that I had to deal with a case of pneumonomycosis aspergillina. But a prolonged and careful study of my slides obliged me to abandon this idea. In none of the slides did I find the characteristic fructification organs of the former, nor even remnants thereof. On the other hand, I have every reason to assume that I found an oidium. Should my assumption be correct, my observation will be the fourth case laid down in medical literature where an oidium was found in the lung, the second time that it was discovered during life, and the first time that it caused gangrene of the lung.

In order to give the specialist every opportunity of classifying the fungus, I give a detailed description of it, as well as the way and means of growing and fructification. Much to my disappointment, I could not procure any books in the colonies bearing on the subject, which would have assisted me in more thoroughly describing the characteristics.

Before entering into a discussion of my microscopical specimens, I will relate the history and symptoms of my case.

R. W., carrier, of Orford, 30 years old, had during his youth a pulmonary complaint, of which it was found impossible to make out the nature and locality. Since then, he has been healthy, showing no particular susceptibility to taking cold. The mother healthy; father confirmed invalid from chronic lung complaint (was tapped several times for hydatid, and afterwards expectorated, cyst); one brother invalid from chronic polyarthritis; the rest of the family healthy. There is no family history of phthisis.

I saw patient first on August 5. He complained of a pain in his side and back. On inquiry, I learned that he had camped out one night, and next morning felt what he thought to be a sprain in the back. He continued to work on the road, hoping it would pass off, but finding it did not, consulted me at the end of the week. After a careful examination, I diagnosed pleurisy. There was little cough, scarcely any expectoration, no rigors or chills at the onset of his illness; very little pain on breathing. Temperature, 99° Fah.; pulse and respiration ratio not exhibiting anything unusual for the diagnosis to be suspected. At the time, I had two other patients under my care suffering from pleurisy who resided in the same neighbourhood. These did well without any medicinal treatment whatever, dietetic and hygienic conditions only being properly attended to.

A few days after first consultation, I again saw patient. There was no material alteration in general constitution; appetite, sleep, and all other functions not markedly impaired. When seen the third time, the only difference I found was an increase of the dulness, which reached upwards above angulus scapulæ. The patient came about fourteen miles on horseback each time.

Four weeks after the first consultation, and ten days after his last visit to me, I was called in. I went prepared to perform paracentesis. On this occasion, I noticed a marked difference. His appearance was indicative of a serious complaint. I now thought I had to deal with empyema, and preparatory to operating,

I made a careful examination of patient. I found him out of bed, face sunken, hollow-eyed, processi zygomatici prominent, voice weak. Temperature, $99\frac{1}{2}^{\circ}$; pulse and respiration ratio a little hurried. Subjective Complaints:—Constant pain in back, poor appetite, little sleep, night sweats, feeling of languor, tiredness, and loss of flesh. Sputum scarce and viscid. On percussion, I found the dulness in the lower part of left thorax rather tympanitic. There was tubular breathing, and bronchophony. The dulness extended upwards above angulus scapulæ, and outwards to the mid-axillary line. Immediately under angulus scapulæ, I found a cavity of about two inches in horizontal diameter. There were consonating râles and cavernous breathing; bruit de pot fêlé, and Wintrich's phenomenon could be distinctly elicited. When I examined the same place about three-quarters of an hour later, I heard tubular breathing only, and found tympanitic dulness.

As you are aware, "cracked-pot sound" is sometimes found just above a pleuritic effusion. But this was not the case here, as it was not heard on the second examination.

On making a preliminary puncture below cavity, I was unable to find any fluid, which I attributed to the presence of pus and my using a small Pravaz syringe.

You will find it excusable that I altered my diagnosis to "phthisis, attended with empyema," and determined to desist from thoracentesis.

I know Fagge and others repudiate the diagnosis, "basal phthisis," and hold it to be chronic pneumonia. To set at rest all doubt, and in order to give a definite prognosis, I ordered some sputum to be sent up for microscopical examination. Before receiving it, I again had occasion to examine the patient a few days after the last visit. He informed me in a low voice that he felt much worse, and very weak. Heavy night sweats were complained of; insomnia and anorexia were present. Bowels at times costive, and others diarrhœic; sputum scarce, neither patient nor attendants noticing anything unusual about it.

Patient was very emaciated, and complained of pain in side and back. This pain had been present from the very beginning, varying in degree at different times. He could lie on either side or back, but preferred lying on his right side, as he felt much easier in that position. The heart-beats were normal but weak, sharp vesicular murmurs were heard in right lung, and also in

front of left. On back of left side, I found all physical symptoms of a cavity. In addition to those mentioned above, percussion yielded amphoric note. For reasons which I need not give here, I made aspiration of cavity, which resulted in air being drawn out.

The next day I made microscopical examination of sputum, which upset my diagnosis altogether. The details are given later on.

From this time, patient got worse daily. Great prostration set in, loss of vital energy was apparent, anorexia became absolute, insomnia complete, severe headache at times, at others drowsy and giddy. On one or two occasions, slight delirium was noticed. This continued for some time, when an incident took place which changed the scene.

Before going any further, I may be permitted to revert to a few characteristic symptoms. From the commencement of his illness, patient always complained of a pain in the side and back. In every communication I had with or from him, this pain was always alluded to, and seemed uppermost in his mind. At times, this pain seemed to wander. It would settle in the shoulder for a considerable time; it was of a peculiar character. It would seem to be in the joint, and at the same time in the front and back of the shoulder, but he was fully aware that it was not in the front.

Laennec, treating of gangrene of the lung, mentions a patient (observation xv), complaining of a pain in the back, between the fifth and sixth ribs, and remarks:—"Cette douleur était très vive et il semblait au malade qu'elle était mobile mais sans sortir de l'intervalle indiqué." Here you find the same character of pain as in my patient. Shortly before the incident, the pain seemed to wander from his back up to his neck. It was so severe that it caused him to roll his head from side to side, the pillow feeling as hard as a board. At the same time the headache, which was mostly confined to the forehead, was most excruciating. The sputum was scarce, of no peculiar smell or taste; it was never noticed to be rusty or bloody. Dyspnoea was very slight, hardly noticeable when patient was quiet. The impossibility of continuous speech was easily attributed to the muscular wasting. The temperature never exhibited anything unusual. It was never high, at times normal, or even below normal.

One day the sputum became rusty, and continued so for some time. Suddenly he experienced a foul bad taste in his mouth, and

his breath became very offensive. This lasted for about a quarter of an hour, at the end of which he expectorated, by the mouthful, an enormous quantity of horribly foetid sputum. These expectorations, which took place at irregular intervals, lasted for two days and three nights. It came up in such quick succession, that the patient was at times nearly suffocated, having hardly time to spit out one mouthful, when another would follow. It was in such quantity, that patient was under the impression that he vomited it up. The stench was something abominable, his mother informing me she was unable to stay in the room any length of time during an expectoration, and that she was obliged to empty the vessel frequently. I cannot give an exact account of the quantity, as the information on such occasions is very misleading. The attendants measured it by the chamberful!

After the third day, the sputum became less; the offensive smell and taste gradually disappeared. The headache ceased as soon as the expectoration began. The appetite improved, and the sleep getting better, the patient seemed to enter into recovery. He got stronger, and was soon able to get out of bed.

Soon after he began to improve, I again saw him. On my enquiring why some of the last sputum had not been sent to me as requested, I was informed that they did not dare to send it on account of its abominable smell. I now ordered some to be sent up. The microscopical find is given further on.

On examination, I heard cavernous breathing in the place before mentioned. The tympanic dulness extended upwards, to about three inches above cavity, on the outside to the middle axillary line, and downwards to about an inch and a half below cavity. I noticed few consonating râles. The sputum was of a greenish colour, of no particular taste or smell, and was not very copious. Heart beats normal, but weak; right lung normal. A pain in the chest was the only thing patient complained of. He felt it mostly in the front while lying down, and in the back while sitting up. Temperature was normal. Patient had greatly improved since I last saw him; appetite being fairly good.

All went on well, until one day patient complained of a tired feeling in his limbs, and a headache in his forehead. The pain in the chest gradually got worse, appetite began to fail, and he slept badly at night. At times he felt drowsy and giddy. Soon prostration set in, which became more apparent day by day. Patient was obliged to take to his bed again, and thought he had caught a

cold. After the lapse of about a week, all symptoms reached a climax. The headache was so intense that he was unable to sleep for two nights. There was complete anorexia; then suddenly he experienced the same bad smell and taste in his mouth, which lasted for about a quarter of an hour, at the end of which time he spat up a great quantity of horribly offensive sputum, amongst which some black particles were noticed. This time the sputum was not so copious, nor did it continue so long as on the former occasion.

When examined, some days later, patient was out of bed. He looked weary and greatly emaciated. His appetite and sleep were improving; headache completely gone; slight pain in the chest still complained of. Temperature normal; heart normal; respiration not dyspnoëic. On percussion, I found the tympanic dullness of a less extent than previously. Amphoric note was indistinguishable. On auscultation, cavernous breathing and consonating râles. I am sorry to say I was unable to make microscopical examination this time.

After that, I received letters at frequent intervals stating that patient was steadily improving.

You must excuse the incompleteness of the history of the case, as I was only able to see the patient a few times. The temperature was so irregularly taken that I refrain from giving the record, but I may state that, as far as I could ascertain, it was of no typical character. Sometimes it was a little above normal; sometimes normal, or below; respiration and pulse were not taken. The few times I took both, they were of an unsuspicious character—at any rate, not indicative of any serious complaint of the lung.

Taking all the symptoms of the case into consideration, I think I am justified in diagnosing abscess of the lung, followed by gangrene. I do not think any objections will be raised against that diagnosis. With regard to the etiology, it is different.

As I stated before, the abscess was caused, in my opinion, by the accidental growth of a fungus in the bronchial tract. Chronic pneumonia is believed to be the commonest cause of abscess of lung, but in my case there was not the slightest evidence, either at the onset or during the course of the disease, to warrant such a belief. Virchow once found aspergillus in the healthy bronchus of a girl who died of dysentery. Now I think it is not very probable that aspergillus, or any other fungus, should be capable of growing on the healthy mucous membrane. Who is to say there

were not alterations in the secretion present, although the anatomical structure seemed to be normal, even to the experienced eye of such a pathologist? In my case the pleuritic effusion will have exercised a deleterious effect on the mucous membrane. This assumption is in some way substantiated by the fact, that the abscess was found in the lower lobe of lung, whereas abscess caused by pneumonia is mostly found in an upper lobe. Lebert found circumscribed gangrene three times out of five on the right side. It was generally peripherally located in the lower lobe.

I am aware that the presence of pleuritic effusion has not been proved beyond doubt in my case, although as far as physical signs are concerned, there can be no doubt that it was present at the commencement of the illness. The fungus growing in the bronchus will have caused local irritation, which will spread apace with the growth of the former. Acting as a "ball-plug," it will allow expiration but not inspiration, resulting in atelectasis. The local inflammation spreading deeper, will reach the arteries, causing an alteration in their walls which is not consistent with the blood circulation. A thrombus will form, causing hæmorrhagic infarction. The exudation will assist, by its pressure, in the formation of the thrombus. The pulmonary arteries will be the first implicated, their blood pressure being less than that of the bronchial arteries. The resulting alterations in the alveolar structure enable the staphylococcus pyogenes to thrive, and exercise its deleterious influence in the formation of an abscess (furunculosis of lung). At one stage, the bronchial arteries get thrombosed, with the result that the nutrition of lung tissue is materially interfered with. This forms a congenial soil for the growth of bacteria of putrefaction.

Up to quite recently, pathologists were greatly puzzled that all cases of pneumonia did not terminate in abscess, pus corpuscles being found in either case. Many theories were advanced to bridge the gulf, but all were unsatisfactory until Bonome published his experimental results, which also afford us the means of arriving at a definite diagnosis in obscure lung disease. Pieces of sterilised elder pith were infected with pure culture of staphylococcus pyogenes aureus, and introduced either into the bronchus or in the lung arteries. This invariably resulted in what he calls "gangrene of the lung." The morbid anatomy of the process was so peculiar, that there can be no doubt that the micro-organisms caused it. The characteristic appearance of the morbid changes

were the same in every case, no matter in what way it was produced. Control experiments, with sterile pieces of elder pith resulted in hæmorrhagic infarct only.

I think it is a pity Bonome did not carry his experiments further—i.e., to introduce pieces of elder pith infected with both staphylococcus and some kind of bacteria of putrefaction. This might have made clear the reason why, in some cases, the death of part of the lung takes place, which is a distinctly different process from abscess of the lung, and must be caused by a specific micro-organism. Putrefactive changes in both abscess of lung and gangrene, are due to the presence of the common bacteria of putrefaction.

These experiments were borne out by an interesting observation by Korányi. In an obscure febrile case of lung disease, cultures were made of blood after cupping. In a few days, he found colonies of staphyl. pyog. aur., but could not find any in the sputum, neither by staining nor culture. On the thirtieth day of sickness, there was an expectoration of 150 gr. of pus, which was followed by the subsidence of dulness in the affected part, and cessation of fever. Recovery took place without putrefaction supervening.

In my case, staphyl. was found in the sputum before there was any apparent symptom of putrefaction. The physical symptoms, together with this discovery, will justify the diagnosis—"abscess of lung" (Browne's gangrene).

All writers are agreed, that it is very difficult indeed to prove beyond doubt the diagnosis of gangrene of lung in some cases.

In my observation, the question arises whether putrefaction of contents of abscess took place only, or whether there was death of part of lung, with putrefaction. In gangrene of lung, the general symptoms are often very severe. What strikes the physician most, and makes him doubtful about his diagnosis, is the extreme prostration of the vital powers in cases of lung disease where the physical symptoms are so disproportionately insignificant. The pulse is weak, small, and frequent. Insomnia and anorexia are present; sometimes diarrhœa. The physical signs are those of cavity. Laennec's remark, "*La résonance de la voix dans les excavations gangrè neuses est beaucoup plus nette et plus forte que dans les abscess du pou mon,*" is, in my opinion, of no assistance in differential diagnosis.

All writers lay great stress on the examination of the sputum. It is said to be copious, of alkaline reaction while fresh, of a grey

or greenish colour, sometimes brown or even black, and separating into three layers after standing. In my case, I was unable to make any observations in this respect. Its smell, and that of the breath, is said to be pathognomic (E. S. Thompson, "Quain's Dictionary").

Laennec, who was the first to recognise gangrene of lung as a special affection, says:—"Les crachats sont tellement caractéristiques que sans eux ses signes seraient tout à fait incomplets." A little further on, he takes away a great deal of the significance of these symptoms, by saying that on three or four occasions, where this characteristic smell was noticed during life, a most careful examination, post-mortem, did not reveal any gangrenous parts. He attributes the appearance of this smell to a general disposition to gangrene, which exercises its influence on the excretions of the bronchi, rendering them foetid. In some cases, there is no foetor of sputum nor breath, and the true nature of the disease is not suspected until found post-mortem.

E. S. Thompson (l. c.) demands the exclusion of suppurative ulceration of cartilages, putrefactive changes in secretions of bronchi, and pyopneumothorax with internal fistula, before one is justified in diagnosing gangrene of lung. I think I can exclude all those in my case.

A few words about the microscopical examinations. In some cases, recognisable fragments of pulmonary tissue have been found, and not in others. Virchow discovered sarcina, and thought it was the cause of gangrene; but its presence is now recognised to be accidental only. Sarcina has nothing to do with the causation of gangrene. Leyden and Jaffé give descriptions of micrococci and bacilli found in gangrene of lung; but these are so vague, that they do not allow of making any conclusion as to their probable causative connection with gangrene, nor do they give any additional assistance to diagnosis. Most of those have nothing whatever to do with the process. These observations were made before Koch published his classical researches, and before the methods of staining and culture were introduced into pathology. These, in connection with appropriate experiments, are the only means of clearing up the pathological circumstances causing gangrene and abscess of lung. Much has been done already in this respect, but there is still much more left for us to do.

In those "plugs," fat globules and Virchow's "mangarinssäure-nadeln" have been found, two varieties of which are described.

Some other microscopical observations are given, but are of no intrinsic value for diagnosis.

I am sorry I was unable to make microscopical examination of the sputum which contained the black spots, as I think they consisted of fragments of pulmonary tissue.

As to etiology of abscess and gangrene of lung, all common causes, such as debilitated condition from *abusus spiritusorum*, injuries to chest, &c., even chronic pneumonia can be excluded in my opinion, although Fagge says that it would be difficult indeed to find unequivocal examples of gangrene, without antecedent pneumonia. Laennec's statement, that abscess of lung as a result of pneumonia was very rare, was objected to by Drs. Crichton, physician to the Emperor of Russia, and Professor Himley, of Goettingen. Laennec explains the difference of opinion by the assumption, that either pneumonia terminating in abscess was oftener seen in the North of Europe, or that the cases were due to a "specific genus epidemicus." Lately, Masing published an account of an epidemic of lung gangrene in the prison at Lemberg; but valid objections have been made to his interpretation of the cases. Bonome calls gangrene of lung a process identical with furunculosis. To Laennec, it seemed to be of the nature of those affections essentially gangrenous, such as carbuncle and pustula maligna, &c. This speaks volumes for the far-sightedness and acuteness of the observer. All these observations show that, as yet, very little is definitely known of the etiology.

None of the above-mentioned causes apply to my case. My opinion therefore is, that the fungus caused it.

The onset and course of disease, as well as the physical symptoms are against the assumption, that chronic pneumonia ended in abscess and gangrene of lung. The expulsion of the fungus made recovery possible; *cessante cause, cessat effectus*. A case in point is given by Grenser, who reported an observation where, in a case of gangrene of lung, a corn-ear was expectorated on the 160th day of illness, after which recovery began. On the other hand, Margath reports a similar case, where death ensued when the corn-ear was found.

Hertz, "V. Ziemssen's Handbuch" observes, that anorexia and diarrhoea are due to the patient swallowing some of the expectorated material. Fagge objects to this, but does not give his reasons for doing so. That by swallowing particles of the substance those symptoms can appear is, I think, beyond doubt. But there have

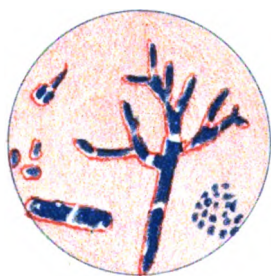


Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.

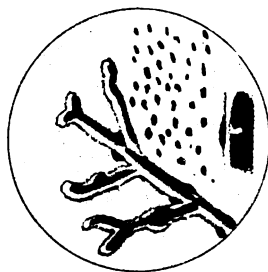


Fig. 6.



Fig. 7.

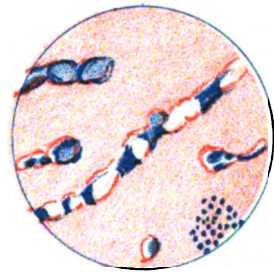


Fig. 8.



Fig. 9.



Fig. 10.

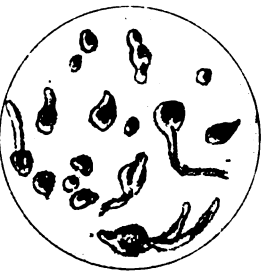


Fig. 11.



Fig. 12.

been cases where no expectoration has taken place, nevertheless those symptoms were present. From analogies of observation made in other complaints attended with putrefaction, I venture to advance an explanation. Around the necrotic part, there is a zone of inflammation. These specific bacteria will produce a ptomaine. As long as there is no free exit these, gaseous or fluid, are absorbed, and circulating in the blood, they must exercise a depressing effect upon those centres which govern the functions of the system; and on the other hand, cause such an alteration in the constituents of the blood, that this is rendered unfit to sustain the vital powers, and the proper discharge of the physiological functions of the cells. The resulting symptoms are sleeplessness, anorexia, prostration, &c.

My case substantiates this hypothesis. Before expectoration, all general symptoms were severe, but gradually disappeared after that took place. They reappeared with a second formation of ptomaine, but disappeared again with expectoration.

The treatment of cases of gangrene of lung is very unsatisfactory. The nature of some cases precludes recovery, others do well independent of treatment. Blood-letting was the main feature in the treatment of this disease in former years. It was pursued until the patient was so weak that a repetition would have proved disastrous, then stimulants were given. As a matter of course, the patient died.

Trousseau was the first to recommend Lungatmidiatik. Following Scoda, he used turpentine, and was satisfied with the result. Other remedies are, balsam of copaiba and cubeba; even sublimate is mentioned. Trousseau expects an energetically modifying effect on the mucous membrane from the remedies, but we know now that they act as germicides.

Paul (*Gazette Médicale de Paris*), recommends an apparatus for inhalation of carbolised air. I used it on a former occasion, but had to desist on account of the weak respiratory powers. Its adoption was out of the question in the present case for the same reason.

In *Therapeutische Monatshefte*, January 1889, I found myrtol recommended for such affections. I ordered it from my chemist, but was informed it was not to be had, he, however, assuring me that by the latest analysis, eucalyptol was found to be identical with myrtol, or to be the active principle, I am not sure which.

My order was to begin with three drops three times a day, and if well borne, to increase to four drops four times a day. The result was very striking. The foul smell quickly disappeared, the

expiration smelling of eucalyptol shortly after its administration. Besides this, inhalation of turpentine was ordered, and every morning twenty drops of same were given with plenty of milk.

All writers lay great stress on the maintenance of the strength of the patient, by good and abundant food. This direction was followed as far as the anorexia of patient would allow. The night sweats were effectually subdued by the administration of a teaspoonful of brandy and milk at bedtime. No so-called stimulants were given. I am quite convinced that my prescription did not cure the patient, but I fully believe that the administration of the drugs had a palliative effect.

I have great faith in turpentine as an adjuvant to the vis medicatrix naturæ. To substantiate this, I need only mention the splendid results obtained by Dr. Lanenstein, of Constantinople, in severe cases of croup.

I fully agree with Dr. Paul, that any drugs taken by the mouth have no effect whatever on the pathological process. Round the diseased part the blood-vessels are obliterated, which prevents the drugs from exercising any effect on them. It is the healthy tissue by which these drugs are excreted. The same argument holds good in cases of phthisis, where cavities are formed. I am equally incredulous as to the curative effect of inhalations. I maintain that in cavities there is no possibility of a sufficient interchange of air to bring the antiseptic properties into action. In bronchitis putrida it is different—the air strikes freely over the affected parts. In cases of cavity, a very small quantity will reach the contents—that part which condensed will follow gravitation. Part will reach the stomach, and there, will probably have an action on the swallowed particles.

The sputum, when put out into a flat vessel, presented all the appearances of that of a phthisical patient. Small pellets were suspended in stringy mucus of a greyish colour (nummular sputum), and it was with more than usual difficulty that I succeeded in removing pieces of it by means of a platinum loop. These pellets exhibited a flocculent surface, but it seemed to be looser and more ragged than it is in the case of tubercular sputum. After standing, they did not fall to the bottom, perhaps on account of their containing air, or being of same specific gravity. On the other hand, they did not rise, but of course this may have been prevented by the tenacity of the mucus counterbalancing the upward tendency of the pellets. Under the impression that the case was

one of tubercular disease, with unusual situation of vomica, I prepared my slides accordingly, but I utterly failed to detect any bacillus tuberculosis.

After a series of experiments, I succeeded in staining the fungus in such a way as to be able to differentiate its constituents. The cover-glasses were prepared in the usual manner. Some difficulty was experienced in effecting an even and thin layer on account of the tight coherence of pellets. If the staining proves a success, the fungus is stained blue, the membrane red, bacilli and micrococci a pinkish blue—all lying on a light red field.

Whenever I happened to put particles from near the centre of the pellets on the cover-glasses, I found an almost pure culture of the fungus, forming a thick, close, and intricate mycel. From the centre of the mycel, filaments would spread in one or more directions. Some of them showed branches on emerging from the mycel, and others not until near the end. The branches show a tendency to a dichotomic formation, although I met with several instances where all the branches were on the same side. Most of them spring from the extremities of the individual cells—from places where the spores are generally found. One filament will traverse several microscopical fields. The terminations of the filaments vary. The majority have rounded and somewhat clubbed ends, but others run out rather sharp. Some of the extremities are more or less wavy, others quite straight. Some show a formation like a rosary, the extreme terminations being then very sharp. In others, there would be two or three clubbed and short protuberances at the end, which would grow out, in time, into end branches. In the minority of end terminations, there were branches springing from the main filament, in close proximity. I found that in these cases the fundamental cell was thickened at its distal part, and showed two or three cavities, according to the number of branches that would issue from it. These branches were separated from the basal cell by a small interval. In one of the latter, the same process would repeat after a further formation of three or more cells; but, as a rule, the end terminations were dichotomic. Each filament and branch are composed of individual cells. The cell is, at its distal part, generally convex, at its central part concave, but some are convex or concave on either side. Around the cell is homogenous substance, which is rather adverse to the stain. It is always a faint bluish colour. The cell and the circumcellular substance are covered by a thick membrane.

One microscopical field (oil immersion $\frac{1}{12}$, ocular 3) might be traversed by two cells and a half.

The membrane shows a thickening opposite where the cells are separated from each other by the above-mentioned homogenous substance.

In individual cells, spores are found, lying generally at the extremities. Most of the branches seem to grow from the same place in which the spores are found. Whenever a branch is about to form, the membrane will bulge. Presently a protuberance will appear in a corresponding part of the cell substance. This will grow out into a cell. As long as only one is present, it will continue in contact with the mother cell, but it soon separates, and from the first, a second grows by apposition. As a rule, the central part of the first formed cell is convex, but sometimes is quite flat. The width of the individual cells varies with their growth; the older they are, the bigger they get. The same is the case with the circumcellular substance and membrane. I did not find any special fructification organs, but found the conidia inside the cells. These are first seen as minute dark blue spots. As they grow, a chemical change takes place in them, and they get covered with a membrane. These differentiation of cell and conidium is evidenced by the different reaction to the stains. The conidia grow bigger and bigger inside the cells, and at last become free. In some of my slides, I saw the membrane of the mother cell torn in one or two places. This so-formed vacuum could be distinctly distinguished by the absence of any stain from those parts of cells which contained conidia. These latter were always of a peculiar and unmistakable colour, inside as well as outside the cells. In some instances I found the conidium partly emerged from the mother cell, but still covered by the membrane. In other slides I found the shells, so to speak, only. All the conidia having become free, the substance of the mother cell was then consumed, the membrane only being left. The conidia were found in abundance within the mycel. I followed the process of their growing out into filaments very closely. First the membrane will sprout in one or more places, then as it gets bigger, the cell substance will put forth one or more protuberances. As soon as an individual cell is formed, it is separated from the conidium by a small space. This cell then grows out by apposition into filaments. Sometimes a branch shoots from the first cell. At one time, the growing filament resembles a small head resting on the conidium, separated by a

small neck. In the basal cell, spores are seen when the third generation is present. The conidia, when growing out into filaments, are themselves divided generally into three parts—one at each side, and one adjacent to where the filaments sprung. In some of my slides I found what, I think, are shells of conidia, grown together, and serving as fundaments for the filaments.

The characteristic feature of an oidium is the formation of conidia inside the cells. This is not the case with *aspergillus* or *mucor*, in which the conidia are formed in special fructification organs. *Penicillium* has neither conidia nor fructification organs. The total absence of the latter, and the presence of the former in connection with the appearance of the mycel and the formation of branches—in one word, the *tout ensemble* of the fungus—bears such close resemblance to an oidium, that I am almost sure of being able to add one more case of pneumonomycosis oidica to the only three laid down in medical literature.

Besides this fungus, I found *staphylococcus* and a small *bacillus*, with rounded ends. In some of my slides, I had an almost pure culture of this *bacillus*, which never showed a tendency to a special arrangement. The *bacillus* is a little longer than its width, and might be mistaken for an elongated *micrococcus*. I think it is the *bacillus putrefaciens*. Occasionally I saw large *bacilli*, few in number, somewhat curved, about four times as long as wide. Furthermore, I found very fine threads occasionally, which did not show any structure.

In those slides which I made after the first expectoration had taken place, I found, besides those above-mentioned *bacilli*, very delicate long narrow ones, forming very thick clusters. *Staphylococcus* and *sarcina* were observed in abundance in nearly every slide. They were, when lying in close heaps, very hard to distinguish. But I found *sarcina* occasionally in such well-defined examples, that a mistake was impossible. It seldom showed a tendency to form bigger aggregations than the well-known "wool-packs," namely, four lying close together, forming a square, but apart from each other. The *bacillus putrefaciens* had disappeared altogether. The greatest significance for diagnosis attaches to the finding of *staphylococcus* (*vide* Bonome's experiments), but the presence of *sarcina* is of no particular importance. Amongst the variety of the *bacilli* and *micrococci*, I found what I think is *leptothrix*.

The process of staining which I adopted is as follows. The requisites are:—(1) A vessel containing liquor potass. 1-10,000, to

which is added as much of a concentrated alcoholic methylene blue solution as to remain just transparent to a thickness of six millimetres; (2) a vessel containing aq. dst.; (3) a vessel containing a weak alcoholic solution of eosin; (4) another vessel with aq. dst.

The cover glasses, prepared in the usual way, are put for $2\frac{1}{2}$ minutes on vessel (1), then washed well in vessel (2), then placed for half a minute in vessel (3), and finally washed in vessel (4). Great pains have to be taken not to leave them too long in vessel (3), or else the alcohol will extract the blue stain out of the fungus. Sometimes it is advisable to re-stain in vessel (1), and wash again in vessel (2), until all superfluous stain is removed.

I purposely refrain from advancing any hypothesis as regards the causal connection between any of the bacteria found and the process, although I feel strongly tempted to think of such with regard to those small bacilli which were found in the first slides, but not afterwards.

It is, at least, a strange coincidence that these were seen in almost pure cultures.

Shortly after settling down to practice at Pyramid Hill, I had occasion to observe a similar, I may say identical, case. In this one, three successive attacks of same expectoration occurred, before each of which the patient experienced the taste and smell a quarter of an hour before. The general symptoms were exactly the same. The only difference in the physical symptoms was that at no time were there any signs of a cavity discovered; but this, of course, is no proof that there was none. I had no microscope with me at that time to examine the sputum.

How closely the case resembled one of pleurisy, even after a very copious expectoration, is evident by the fact that an eminent surgeon of Sandhurst, who was called in in consultation, tried to perform paracentesis at three different places, although I had informed him that there could not possibly be any fluid.

EXPLANATION OF DRAWINGS.

Figures 1, 2, 3, 4, 5, 6 demonstrate the different forms of end terminations.

Figure 7 shows conidia escaping from cell, and different forms of end terminations; also staphylococcus.

Figures 8 and 9.—Conidia formation and empty cells.

Figure 10.—Conidia formation and end terminations.

Figure 11.—Conidia sprouting to filaments.

Figure 12.—Individual cells, growing branches.

Throughout the drawings.—*bacillus putrefaciens* (?) and staphylococcus.

Leitz's microscope, oil immersion $\frac{1}{12}$, ocular 8.

Professor ALLEN said that the Society was much indebted to Dr. Ross for his paper, but on account of the faulty acoustic properties of the hall he had been unable closely to follow Dr. Ross in his remarks, and so a proper discussion of the paper was impossible. In all cases of gangrene of the lung, after eliminating cases due to embolism, and to failure of the right heart, accompanied by a low condition, we should examine for aspergillus.

Dr. JAMIESON said that he was much interested in Dr. Ross's paper. He remembered some cases being recorded where embolism had occurred, and oidium had been found, following severe ulcerative thrush.

The PRESIDENT thought the case of great interest, as was anything that would throw light on such diseases when occurring in young subjects. It was always well to remember that in such cases it was still a question as to whether the germ was the cause of the disease, or merely a parasite that in the diseased parts found a suitable nidus for its development.

British Medical Association.

VICTORIAN BRANCH. .

ORDINARY MONTHLY MEETING.

Wednesday, November 27th, 1889.

(Hall of the Medical Society, 8 p.m.)

Dr. NEILD in the chair.

There was a small attendance of members.

The minutes of the last meeting were read and confirmed.

The CHAIRMAN announced the election of the following gentlemen:—Thomas Cochrane Anderson, M.A., M.B., Ch. M. Aberdeen; Alfred Hobart Sturdie, M.R.C.S. Eng.; and Hernian Trevor Lawrence, M.R.C.S.

The following paper was then read:—

NOTES ON A CASE OF DIFFUSED POPLITEAL ANEURISM.

By G. A. SYME, M.B., M.S., F.R.C.S. Eng.

The following notes may be of interest, both because cases of the kind are not of very frequent occurrence, and when met with are apt to be attended with difficulty in diagnosis, and also because the question of treatment admits of discussion.

J. J., æt. 38, a male negro cook, was transferred to my care as an out-patient at the Melbourne Hospital, from the Medical side, in the beginning of last August. He complained of severe pain in his right knee and leg, with swelling of the limb. The right leg and foot were found to be œdematous, and the lower third of the thigh was very much swollen, especially on the inner side, over and in front of the adductor magnus. This swelling was diffuse, very tense and elastic, and apparently fluctuant, the fluctuation being most marked where the swelling was most prominent. The tissues above and below the maximum swelling were tense and brawny. The popliteal space was not so much encroached upon as the front and sides of the limb. The swollen part felt hotter to the touch than the corresponding part of the other limb. Not the slightest pulsation or bruit could be detected in the swelling. The tibial arteries could not be felt at the ankle.

The man's expression was anxious; his tongue was coated, his temperature 99° F. He stated that for about three months he had suffered from severe pain in the knee, shooting down the back and front of the leg, and that, when he first noticed the pain, his feet and ankles became swollen in the evening. The swelling extended gradually up the leg to above the knee, where the pain became fixed, and where the swelling steadily increased; during the last few days it has diminished in the foot and leg. The pain is very intense now, and much worse at night, preventing sleep. All the symptoms came on very gradually. He has not injured the leg in any way. He cannot remember having at any time experienced any sudden pain in the ham, or any feeling of faintness. He never noticed any swelling in the groin, or any pulsation there, previous to the present trouble. He has not been subjected to any very great physical exertion or strain, but his occupation involves much standing. His general health has been good, though he has been a heavy drinker. No history of syphilis could be obtained, nor were there any signs suggestive of his having suffered from this disease.

The symptoms and physical signs clearly indicated considerable pressure on the popliteal vessels and nerves, but what it was that occasioned the pressure was not so obvious. It was evidently not an ordinary popliteal aneurism, nor was the maximum swelling in the line of the vessel. Was it a diffused aneurism? Such a condition seemed to explain most of the symptoms, but still its gradual onset during three months, without the occurrence

of actual gangrene, the recent diminution in the œdema of the foot and leg, the entire absence of pulsation, and of any history of a tumour or pulsation before the present condition supervened, all seemed rather against such a diagnosis. Then, the brawny induration and œdema, the fluctuation, increased heat and pointing of the swelling, were strongly suggestive of an abscess, but the constitutional disturbance did not seem proportionate. Might it not be a periosteal sarcoma of the lower end of the femur? Such a condition also would explain most of the symptoms, except that the rapidity of the growth seemed too great, even for a sarcoma. On the chance of finding an abscess, I introduced an exploring needle; blood only escaped, and that under considerable pressure.

The patient was admitted to the hospital, and, owing to the kindness of Mr. Chas. Ryan in placing a bed at my disposal, remained under my care. A consultation was then held, at which the staff appeared to be of opinion that the swelling was due to a periosteal sarcoma, and advised amputation at the hip-joint. The patient consented to any operation that was deemed advisable.

On the 8th August, the patient being anæsthetised, and an Esmarch's tourniquet applied round the thigh, I explored the swelling. On cutting into it on its inner aspect, a sudden and profuse gush of venous blood ensued. I passed my hand into a large cavity, and removed several large clots, some dark and recent, some decolourised, some even laminated. The cavity was then syringed out, and at its bottom could be seen the remains of an aneurismal sac, extending up to the opening for the artery, through the adductor magnus. On loosening the tourniquet, arterial blood jetted from the upper end of the sac. The incision was enlarged, with the view of determining the condition of the artery above and below the sac. The lower end could not be found, the upper was very degenerate and friable, breaking away when seized in the forceps. What was the proper procedure now? Several of my colleagues strongly advised that an attempt should be made to secure the vessel above and below the sac, and that the superficial femoral should be tied in Scarpa's triangle. To my mind however, such a course, supposing it feasible, seemed hazardous in the extreme. If the Scylla of secondary hæmorrhage were avoided, the Charybdis of gangrene seemed almost inevitable. The patient was not a good subject for an experiment, I therefore decided to amputate the thigh above the aneurism. The patient

has made an excellent recovery, the stump healing almost entirely by first intention. He was discharged on the 11th September a small sinus remaining, leading down to the bone, which has now closed.

The question remains for discussion, whether in a similar case it would be possible to save the limb? The first point is, whether the exact condition ought not to have been diagnosed in the first instance, and supposing it had been, whether ligature of the femoral would have been effectual. Erichsen discusses the treatment of diffused popliteal aneurism very fully, and concludes that when no pulsation exists, amputation is the only resource. It must be remembered however, that Erichsen's discussion refers to a diffused aneurism, that has not been opened. But when the effused blood has been all cleared away, would not the pressure preventing the establishment of collateral circulation be removed, and the danger of gangrene much reduced. On the other hand, we may presume that the probability of secondary hæmorrhage would be very great, and all authorities I have been able to consult agree with Erichsen, that when a diffused aneurism has been opened by mistake, the only resource is amputation. Nevertheless, I must confess that I am not clear as to how great the risk of secondary hæmorrhage would be, were both ends of the artery above and below the sac secured with broad aseptic animal ligatures, and strict asepticism maintained. Another debatable point is:—Supposing one elected to tie above and below the sac, ought the superficial femoral to be tied also? Would such a procedure really diminish the risk of hæmorrhage, or if it did, would it not increase the risk of gangrene?

Dr. NEILD and Dr. HOOPER discussed the paper.

The Secretary read the following paper:—

A SHORT DESCRIPTION OF FIVE CHINESE LEPERS AT QUARANTINE STATION.

By J. DE BURGH GRIFFITH, M.D.

By the courtesy of Dr. Browning, I was able to visit the leper station in the Quarantine reserve, and have jotted down a few notes to accompany the sketches herewith forwarded. These photos. are all recent, and have been taken by Dr. Browning, Superintendent of the Quarantine Station.

The leper station is situated far back in the bush, between the small-pox hospital and the cattle quarantine grounds, not very far

from the back beach. The station consists of four weatherboard cottages, well built and fairly comfortable. Each is divided off into two compartments, so that each man may have a room. The patients are provided for by Government, and a healthy Chinaman is paid for attending on them.

The five sufferers in the station are in various stages of this loathsome disease, some presenting at first sight little apparent sign of leprosy, while others are most fearfully disfigured and mutilated. Two of the cases are comparatively recent, while three others have suffered 25, 22, and 6 years respectively.

CASE I.—Ah Kan is 45 years of age, native of Hong Kong, and for many years has lived in Sandhurst. He has been six months in quarantine. Patient is in the early stage, and so far is free from serious mutilation ; skin on face, hands, and arms is brawny, thick, and discoloured ; on the face also are many small tubercles, which in time will break down and ulcerate. Already two or three superficial ulcers are on the dorsal aspect of left arm, as seen in the photograph. The colour of the skin is of dull copper, and in patches is harsh and scaly ; over front of shins, it is particularly scaly, and of a whitish, glistening nature. The feet are thick, puffy, and appear infiltrated. The man appears much debilitated, and the pulse is small and frequent. No family history of leprosy. He states his parents are living in China, and are healthy. He does not appear to suffer pain, and there seem to be patches of skin which are insensitive.

CASE II.—Ah Quong has died since these notes were first sketched. He suffered fearfully from painful ulcerations (cutaneous), and was greatly mutilated. Nearly all his fingers were eroded right down to the metacarpus, and all the toes on both feet were gone. This unfortunate man frequently begged for poison to end his life. However, he died a natural death from exhaustion. No history of hereditary disease.

CASE III.—Ge Tie, aged 50 years, native of Hong Kong ; twelve months in the station. Face, arms, chest, and abdomen covered with rough, thick, dark-coloured integument ; patches on the face becoming light-coloured, especially on the forehead and nose. Skin over shins is white with glistening scales, like psoriasis ; there is some ulceration of the skin on legs and on the scrotum. Back is free from diseased tissue. The half-closed eyelids, and drooping of the lower lip is due to fulness and infiltration of the tissues, which is occasionally extreme in the forehead and eye-

brows, and gives a fierce and frowning appearance, named by authorities "*lepra leontina*." This condition was well marked in Case II. before death.

CASE IV.—Sam Tart, aged 55 years, has been a leper for 25 years. Fearfully mutilated in face, hands, and feet. Nothing but stumps of hands and feet remain. Skin generally is dusky, or dark copper colour, hard and insensitive. He suffers no pain, and the disease appears to be at a standstill. He states that the hands and feet were first invaded.

CASE V.—Ah Yout, aged 52 years, has been suffering for 22 years. All the time in Ballarat. Fingers and toes on both hands and feet eroded, leaving only the palms and withered and shrunk feet with stumps of metacarpal bones sticking out. Body wasted. Skin on face and body very white, and free from scales or scurf. At the time of my inspection, an ulcer existed in the right groin and under the left heel, and these were the only open sores in this case, which completes the series.

For obvious reasons, a very close or minute examination of these men has not been made, nor was there any inspection of the case that died, so that the condition of internal organs cannot be stated, but it may be fairly assumed, in the absence of any complaint by the men, or symptoms, that the functions of organic life are fairly well performed. However, I do not intend to discuss the disease, but simply give a short sketch of each case, to accompany the photos, and hope both may be of some interest to the Society. The fact that two of the lepers have been each for a quarter of a century in Ballarat, suffering from the disease all the time, is in my mind a very instructive fact, for the disease was due either to inheritance, infection, or generated by the nature of surroundings of their life in the colony; and moreover, as far as I am aware, no fresh case of leprosy has yet been traced to infection from these patients.

The CHAIRMAN read a letter from Dr. Griffith, asking the Society to express an opinion on the question of allowing the lepers to smoke opium if they wished.

Mr. SYME moved, and it was seconded and carried unanimously, that in the opinion of this meeting of the Society, the lepers at the Quarantine Station should be allowed to smoke opium.

The meeting then adjourned.

Australian Medical Journal.

DECEMBER 15TH, 1889.

MEDICAL EDUCATION.

The recent address of Mr. Wheelhouse, as President of the British Medical Association, and the inaugural speeches of Drs. W. T. Gairdner and Clifford Allbutt, each of which dealt with medical education from a somewhat different standpoint, show that this subject is attracting much attention in Great Britain. The imperfections of our course in Melbourne become yearly more obvious, and as it is understood that the Faculty of Medicine has under discussion some proposed changes in the curriculum, the above mentioned addresses are worthy of their earnest consideration.

That existing systems are more or less unsatisfactory, is largely due to the fact that medical education is in a state of transition. So long as medical science continues its present rapid evolution, so long will frequent changes in our methods of medical education be necessary. It would be as hopeless as absurd, to think of planning now a curriculum that should be final and perfect. It is high time, however, to get rid of many of the traditions of the past, both as regards subject-matter and methods.

In olden time, when learning of all kinds was in the possession of the few, and printed books hardly existed, the didactic lecture was almost the only means of imparting knowledge. Medical knowledge especially was largely empirical, and hardly adapted for demonstration.

Mr. Wheelhouse remarks of the physician of only fifty years ago—"His treatment was chiefly based on nomenclature, and he who was believed to possess the greatest number of formulæ for the greatest number of complaints, was regarded as the cleverest and most desirable doctor. He had a good sound knowledge of drugs in general, and of what they could do, he was sadly too ready to rely on them." In short, he was little better than an apothecary,

and for the general practitioner, the license of the Apothecary's Hall was the only medical diploma. Under these circumstances, *Materia Medica* and Pharmacy were the most important of his studies, and Pathology was unknown.

Nowadays, as Medicine becomes more and more an exact science, every one of its departments becomes more capable of practical demonstration, while the multiplicity of text books on every subject, renders the didactic or systematic lecture more and more unnecessary. Year after year, new subjects have been added to the curriculum, each of which demands practical demonstration, such as Natural Philosophy, Organic Chemistry, Biology, Physiological Chemistry, Histology, (normal and pathological), Practical Physiology, Pharmacology, and Bacteriology.

The time occupied by the course, however, has not been extended, old subjects have not been dropped, the didactic lectures continue. The burden of examinations increases in proportion, and the only way the average student sees out of his troubles is cram, or the help of the professional grinder. The number of students however, curiously enough does not diminish, and competition between practitioners is becoming so keen, that the dignity of the profession is oftentimes difficult to uphold.

One fact therefore becomes very clear, both as the outcome of the three addresses referred to at the outset, and as apparently the only solution of some of the difficulties in arranging our own curriculum—the course must be lengthened. It has been suggested that this lengthening might be partly indirect, by making Natural Philosophy and Inorganic Chemistry compulsory subjects at Matriculation for medical students, and raising the standard of examination in these subjects. In this way, room could be made for Anatomy as a first year subject. Another suggestion is to make the Bachelor of Surgery a distinct degree, as it is in London, the examination for which might be held six months after the M.B. During this six months, the students could hold appointments as clinical assistants in the Out-patient Department, or senior dresserships in the wards, and attend Clinical and Operative Surgery.

Another desirable change would be, to make attendance on all didactic lectures optional. If the lectures proved to be an assistance, students would attend them, while the Lecturers would be stimulated to make their teaching interesting. Systematic lectures on *Materia Medica* might well be abolished. Teachers should be allowed a free hand, and it might be even advisable to substitute the title of Teacher for that of Lecturer. Perhaps there is not much in a name, but a Lecturer is presumably a person who delivers lectures, and what is wanted is teaching, and not the dictation of lectures compiled from a number of text books. It is becoming more and more recognised also on the Continent of Europe and in America, that the Teacher must have that living interest in his subject which comes from the daily application of it in practical work—a principle which has always been carried out in the London schools, where all the teachers, except in such subjects as Chemistry and Biology, are members of a Hospital staff.

Another difficulty in arranging a curriculum, is to determine the relative importance of different subjects, and the period of the curriculum at which they should be taught. Difference of opinion exists also as to the time to be spent in practical work at the hospital. These questions, however, must be considered on a future occasion.

THE NEW HEALTH ACT.

The Bill to create a Department of Public Health, and further amend the law relating to Public Health, has been so modified in its passage through Parliament that it may be useful to give a *résumé* of some of the chief enactments of the Public Health Act 1889, and more especially of such as affect the profession.

APPOINTMENT AND POWERS OF BOARDS OF HEALTH AND THEIR OFFICERS.

The Central Board of Health is abolished, and a Board of Public Health instituted, consisting of a chairman (who is the permanent head of the department), a medical inspector (who is a legally qualified practitioner, and an expert in sanitary science), and seven representative members elected by the councils of

municipal districts—one for Melbourne city, one for the North Yarra group, one for the South Yarra group, one for the Eastern Boroughs group, one for the Western Boroughs group, one for the Eastern Shires group, and one for the Western Shires group. The medical inspector shall be appointed and removed by the Governor-in-Council, and shall not be subject to the provisions of the Public Service Act. All the powers, rights, and authorities vested in the Board, shall, whenever he deems fit, be exercisable by the Minister, and when so exercised, shall, if so ordered by the Minister, supersede any act, direction, notice, or order of the Board.

The local boards of health are abolished, and their powers and duties transferred to the local councils, and all officers heretofore appointed by a local board shall become officers of the council.

Every council, when required by order of the Board, shall appoint officers of health, analysts, and inspectors. If any council does not, within two months after it has been required to do so by the Board, appoint such officers, it shall be lawful for the Governor-in-Council to appoint an officer.

The Governor-in-Council may remove any officer of health, analyst, or inspector of any council, and no officer so removed shall be eligible for re-appointment without previous approval of the Governor-in-Council.

No officer appointed by the Governor-in-Council shall have his salary reduced, nor shall be removed by any council, without the previous approval of the Governor-in-Council.

DISEASES AND HOSPITALS.

“The Board may, upon such proof as it thinks sufficient, or any council may, upon proof by the certificate in writing of the officer of health of such council that any house or building contains any person suffering from small-pox, cholera, yellow fever, diphtheria, or any other ‘dangerous, infectious, or contagious disease,’ order that such house be effectually isolated until such order be revoked, or until the issue or refusal of an Order-in-Council under the provisions of section seventy-five of the Principal Act.”

“During any time that the disease of small-pox is by a notice in the *Government Gazette* declared to be present in Victoria, any person who owns, occupies, or who is in charge of a house or building in which any disease, illness or complaint attended with

eruption or eruptive symptoms accompanied with fever, occurs, and who neglects to report the occurrence of such disease, illness or complaint to some officer of the Board, or the council or officer of health or officer of police for the district immediately on the existence of such disease, illness or complaint coming to such person's knowledge, shall, on conviction of such neglect, forfeit a sum not exceeding twenty pounds and not less than two pounds; and if in any summons under the provisions of this section neglect to report is alleged, the proof of compliance with such provisions shall be upon the defendant."

"Upon proof by the certificate of the officer of health of the municipal district and two legally-qualified medical practitioners that any person is suffering from small-pox, cholera, yellow fever, or any other 'dangerous, infectious or contagious disease,' and that the removal of such person is necessary to prevent the disease from spreading, such person may, with the approval of the Board, be forthwith removed under the direction of the officer of health to any suitable place appointed by the Governor-in-Council for the purpose within the district in which such person resides, or to the Sanatorium at Cut-paw-paw, and such person shall be kept therein until released by order of the Board or of the Governor-in-Council, and such person may be accompanied by any relative or friend who may desire to nurse or take care of him, and such relative or friend shall also be kept therein until released by order of the Board or of the Governor-in-Council.

"For the purposes of this section or of sections seventy-five or seventy-seven of the Principal Act, if two legally-qualified medical practitioners do not reside within the municipal district, it shall be sufficient if such certificate be signed by one such practitioner."

"The Governor-in-Council may from time to time make, alter, and revoke regulations for the inspection, drainage, good management and sanitary regulation of all private hospitals, or houses, buildings or places, other than institutions in receipt of aid from the State, in which persons are received and lodged for medical or surgical treatment or care.

"The Governor-in-Council may by such regulations require the registration of such hospitals, houses, buildings or places, and may also provide for the cancellation of such registration where necessary.

"The Governor-in-Council may prescribe by such regulations the use of a proper register for the registration of all cases admitted into or treated in any such hospital, house, building or place, and for the inspection of such register by the medical inspector, or by any officer of the Board, or by any person expressly authorised thereto by the Board.

"After the making of such regulations, any person opening, occupying or conducting any such hospital, house, building or place without having previously registered the same, or continuing to occupy or conduct any such hospital, house, building or place after registration thereof has been cancelled, shall be guilty of an offence against this Act."

The remainder of the Act is not so directly of interest to the profession. It deals first with

ADULTERATED AND UNWHOLESOME FOOD.

Sale of milk from diseased cows is prohibited, and power is given to the Board to make regulations for the inspection of dairy farms and milk stores, and for destroying or removing from any dairy, &c., any diseased animals, or for removing any sick person from the premises of any such dairy, milk store, milk shop, or milk yard. Secondly—

OFFENSIVE TRADES

cannot be carried on without the consent in writing of the Council. If the consent be granted, any person objecting can appeal to the Board.

Abattoirs, stables, cow sheds, &c., must be constructed of suitable materials, with impervious floors and drains.

Thirdly. Councils individually, or together, are empowered to erect

DESTRUCTORS FOR THE TREATMENT OF REFUSE,

and if so ordered by the Board shall do so. Councils are also empowered to make regulations for the removal and destruction of house refuse, and for the establishment of the double-pan service for nightsoil. Drainage into a stream or lagoon may be prohibited.

BUILDING ON UNHEALTHY SITES

may be prohibited on a certificate of the officer of health, or of any two legally qualified practitioners, or of any inspector or officer of the Board, that the site is unfit for habitation. If

there is a building on such land the Council may, if necessary, order that such building be removed or destroyed, and if such building has been erected prior to the coming into operation of the Act, compensation is to be paid to the owner.

The provisions as to building are as follow:—

“(1) As to streets existing on or before the first day of January one thousand eight hundred and ninety.

“No person shall after the commencement of this Act erect a dwelling house in any city town or borough or in any portion of a shire which has been at any time a borough or to which Part I of “The Police Offences Statute 1865” has been extended unless such house and the site and curtilage thereof can be properly drained.

“(2) As to streets not as yet formed or dedicated as public highways but which have been surveyed laid out and shown on plans of lands subdivided and of which any allotment was sold prior to the first day of January one thousand eight hundred and ninety.

“Where land has been so subdivided and sold with frontages to streets shown on plans prior to such last-mentioned date nothing in this section contained shall prevent the erection of a dwelling house thereon ; if without passing through the house there is reasonable access to the back premises and offices for the removal of nightsoil and other refuse to a street or to a lane ten feet wide at the least ; and if such house and the site and curtilage thereof can be properly drained.

“(3) As to streets not existing on or before such last-mentioned date:—

“(a) Every such street shall be fifty feet wide at the least except lanes footways alleys or passages which shall be ten feet wide at the least.

“(b) No person shall erect a dwelling house in any city town or borough or in any portion of a shire which has been at any time a borough or to which Part I of “The Police Offences Statute 1865” has been extended unless the site or curtilage of such house has a superficial area of at least one thousand six hundred and fifty square feet and has a frontage to a

street at least fifty feet wide; and unless without passing through the house there is reasonable access to the back premises and offices of such house available for the removal of nightsoil and other refuse to a street or to a lane ten feet wide at the least; and unless such house and the site and curtilage thereof can be properly drained."

PRESENTATION TO PROFESSOR ALLEN.

A large gathering of the members of the medical profession assembled at the Medical Society's Hall on the 11th inst., when Professor Allen, dean of the faculty of medicine, was presented with an illuminated address, a handsome bookcase, and a service of silver plate, in recognition of his services as honorary secretary of the Intercolonial Medical Congress of 1889.

Professor Allen is on the eve of a prolonged visit to Europe, and this was thought to offer a good opportunity for asking him to accept some tangible expression of the regard in which he is held by his *confrères* in the Victorian section of the Congress.

Mr. T. N. FitzGerald presided, and, in a happy speech, sketched the Professor's career, and said that the real success of the late Conference was due to his indefatigable zeal, work, and ability. It was well Professor Allen should have an opportunity of seeing what was being done in the older schools of the world, and that those of the older schools should know what Australia could accomplish in the way of teaching.

The address was a re-echo of Mr. FitzGerald's remarks.

Professor Allen, in returning thanks, said a great deal too much had been said of his services in Congress and elsewhere. The work was by no means light, but he could say with all truth that he enjoyed the work. Success could only come from the hearty co-operation of the whole brotherhood; and one of the most pleasant features of the Congress was the cordial and friendly way in which the committees and members of committees worked together. He hoped the help given by the Government to the Congress was only an earnest of what would be done in the future for the development of science in the colonies. And he further hoped, that the public opinion created by the Congress through the press in the matter of sanitary reform, would not flag until they had a metropolitan board of works, and the sanitary reproach was taken away from the city.

ANNUAL MEETING OF THE NEW ZEALAND MEDICAL ASSOCIATION.

The Fifth Meeting of the Association will be held in Dunedin on Wednesday, February 19th (and following days), 1890.

The above date has been fixed in anticipation of its suiting the convenience of members and others who intend having a holiday during the progress of the New Zealand Exhibition, &c.

The President and Executive Committee of the Otago Branch (Dunedin) of the Association offer a cordial invitation to all medical men to attend the sittings, though business can only be transacted by members.

Papers, exhibits, &c. are invited from members and others on any medical, surgical, or special subject, and on subjects allied to the science of medicine.

A programme will be printed about the 1st of February, and all those intending to contribute any material should communicate with the Hon. Sec., Dr. Gordon Macdonald, High Street, Dunedin, on or before that date, so as to ensure their names and titles of papers, &c., being entered on the programme.

Reviews.

The Annual of the Universal Medical Sciences. Edited by Charles E. Sajous, M.D. F. A. Davis, Phila., N.Y., and London, 1889.

The first issue of this work for the year 1888 was a new departure in medical literature, and a marvel of enterprise. The editorial work must have been prodigious, and on the whole was remarkably well done. The issue for 1889 even excels its predecessor in many respects, especially in its arrangement and indexing. The abstracts, too, are more comprehensive, and have been culled with more judgment as to their practical usefulness. The references to periodicals are much improved by giving the date, number, or volume of the journal quoted. We also note a greater uniformity in the articles, and more abstracts from foreign literature than in the past issue, in which there was rather too much tendency to insert long extracts from standard English and American journals, like the *British Medical Journal* and *New York Medical Record*. We can only congratulate editors and publishers on the high excellence of the work, which will be indispensable as a work of reference to every one who wishes to keep abreast of the times.

University Intelligence.

THE MELBOURNE UNIVERSITY.

At the meeting of the Council held on the 18th ult., a letter was received from the Dean of the Faculty of Medicine, recommending that in the case of a certain second year student, who had served for four years in the shop of a pharmaceutical chemist, that experience might be accepted in lieu of the six months' instruction in practical pharmacy "in some school of pharmacy or other institution approved by the council on the recommendation of the faculty." A long discussion ensued. It was ultimately decided to inform the faculty that the Council could not legally carry out its recommendation, and to suggest that the faculty should recommend some means by which the legal difficulty might be got over.

At its meeting on the 25th ult., the Council received from the Dean of the Medical Faculty a reply to a letter from the Council referring to an application by a second year medical student (Mr. D. M'M. Officer), who had spent some years in the shop of a pharmaceutical chemist, that the experience thus gained might be accepted in lieu of the six months' attendance at a school of pharmacy prescribed by the regulations. Professor Allen stated that the student concerned had gone through his course in pharmacy before the present regulations came into force, and at a time when six months' service in the shop of a recognised pharmaceutical chemist was accepted. The faculty recommended that he should be allowed his certificate *nunc pro tunc*, as had been done in other cases of a somewhat similar nature.

After some discussion, the Vice-Chancellor moved—"That the Council regrets that it has not power to comply with the application of the faculty."

Dr. Robertson moved, as an amendment—"That the grace of the Council be extended to this student, and that he be not required to again attend the course in pharmacy."

The motion was carried.

The Dean of the Medical Faculty wrote in regard to the recognition of the medical degrees of this University in Great Britain. He stated that in November, 1887, a petition was adopted by the Council for presentation to Her Majesty in Council, praying that the Imperial Medical Act 1886, part II,

should be made to apply to the colony of Victoria. If that were done, graduates in medicine and surgery from this University would be able to apply to the General Council of Medical Education for registration in the Imperial Medical Register. The Privy Council had been unable to grant the request, because of a provision in the Medical Act of this colony that no person should be registered who was not a natural born or naturalised subject of the Queen, which was not required in the Imperial Act. The law in this colony had now been amended in that respect to agree with the Imperial Act, and the faculty recommended that the petition should be renewed. On the motion of Mr. Ellery, it was decided that the recommendation of the faculty should be adopted.

Professor Allen wrote, applying for leave of absence on half-pay for twelve months, to enable him to visit Europe. He stated that he had been employed continuously in the University for fourteen years, first as a demonstrator in the medical school, then as a lecturer, and latterly as a professor. The Premier had commissioned him to make inquiries in regard to matters affecting public health, and as his medical experience had been so far entirely colonial, he was anxious to supplement it by a visit to some of the older medical schools of Europe. The consideration of the application was made an order of the day for next meeting.

At the meeting of the Council held on the 2nd inst., on the motion of Mr. Justice A'Beckett, it was resolved to grant the application of Professor Allen for leave of absence on half-pay during the year 1890. Professor Allen, who was in attendance, was asked to give the Council his views as to securing *locum tenentes* to take up his teaching in the meantime, and said he apprehended no difficulty in obtaining competent men among the graduates of the Melbourne University. The only question was, whether he should nominate gentlemen and refer the names to the faculty for recommendation to the Council, or whether the form of calling for applications by advertisement should be gone through. He considered the former course most advisable. It was decided to ask Professor Allen to submit the names of the *locum tenentes* he would suggest to the faculty, who should be requested to make a recommendation to the Council.

Mr. Seymour Farrage Gibbs, son of Mr. J. H. Gibbs, the late comptroller of stamps in this colony, has successfully passed through his medical studies in London, and is now a member of the Royal College of Surgeons, and a licentiate of the Royal College of Physicians, England.

Hospital Intelligence.

THE MELBOURNE HOSPITAL.

At a special meeting of the Committee held on the 19th ult., the report of the Sub-Committee appointed to inquire into the conduct of certain of the nurses towards the Secretary. Among other things, it stated that there was some dissatisfaction amongst some few of the nurses; that there was little ground for such dissatisfaction, which had arisen from the desire of the Secretary to have the strictest discipline.

"The Committee advised that in the future, except in special cases, when it may be urgently necessary that the Secretary should dismiss any nurse, it should be the duty of the Secretary merely to suspend, and that any nurse suspended should have the right to be dealt with by the Committee before being dismissed.

"The Committee felt that Mr. Williams's valuable report on the improved system of nursing, observed during his visit to the hospitals of the old world, was actuated by a desire to improve the nursing system of the Hospital, and they think that his remarks were not sufficiently understood, and therefore were the cause of the unpleasant feeling on the part of the nurses.

"The Committee are of opinion, that all complaints should be made through the Matron, who has control of the female nurses and servants, to the Secretary, who should report to the Committee."

On the 26th ult., the ordinary fortnightly meeting of the Committee of the Melbourne Hospital was held. The most important business before the meeting, was the election of a Matron for the Institution, and after a long discussion, the selection was postponed for a week. No fewer than twenty-one applications for the position had been received, but of these, three were withdrawn at the last moment, including that sent in by the acting Matron. A Sub-Committee sat on Monday last to make recommendations from the list, but owing to differences of opinion between the members of the Sub-Committee, no report was furnished to the Committee yesterday. This circumstance was alluded to by Mr. Butters, M.L.C., who ascribed the fact that the Sub-Committee failed to act to the language used by Mr. Rappiport with regard to the acting Matron. Mr. Rappiport denied that he had shown any personal hostility to the appointment of the acting Matron, and stated that he voted against her name

being recommended to the Committee, because her qualifications were not sufficiently high. It was also contended that Mr. Williams, the Secretary of the Hospital, had over-stepped his powers in advertising for applications from persons who possessed hospital training, and who were capable of imparting instruction to the nursing staff, whereas the rules of the Institution did not specifically lay down the necessity for such qualifications in candidates for the office. The election of the Matron was deferred until next Tuesday.

At the meeting of Committee held on the 3rd inst., Miss Isabella Rathie, of the Hobart Hospital, was appointed Matron.

THE ALFRED HOSPITAL.

At a meeting of the Committee held on the 6th inst., the following explanation in reply to an inquiry by the managers was forwarded by Dr. O'Hara, in reference to a reported case of supposed small-pox, recommended for admission to the hospital by Dr. O'Hara, and refused by the House Surgeon :—

"Gentlemen,—When I assure you that 'varicella' is the simplest and mildest of the contagious diseases, and when I also explain that I am aware of diphtheria, typhoid, phthisis, and scarlet fever being treated in the Alfred Hospital, you will understand that I did not think the rule relating to infectious diseases was carried out with such stringency. I telephoned to my house surgeon, Dr. Gault, to put the patient in the cottage which I thought was set apart for contagious diseases. In conclusion, I must express my regret if I have infringed the rules of the hospital, and would beg to ask the managers if for the future the rule *re* admission of 'infectious cases' is to be carried out in its entirety."

Upon discussion, it was resolved to forward the following reply :—

"That Dr. O'Hara's explanation be not considered satisfactory—(1) Because the case was apparently at first a case of variola. (2) That if the doctor knew that the case was simple varicella, there was no occasion to recommend it to the hospital. (3) The manifest necessity to comply with the rules should not be ignored."

A communication in reference to the proposal for increased hospital accommodation was received from Mr. Derbin Willder. It stated that at a special meeting of the General Executive Com-

mittee, held on the 2nd inst., it was resolved, that they were not able to waive the conditions referred to in a previous communication of the 19th ult. The following resolution was carried:— "That as the semi-official compromise arrived at last week between Sir Benjamin Benjamin and Mr. Willder on the one part, and Mr. John Thomson, on the part of the hospital, having fallen through, the managers of the Alfred Hospital do not see their way to comply with the conditions proposed by the Increased Hospital Accommodation Committee."

It will be remembered that at the last meeting of the managers, it was resolved to at once accept £3500, being half of the amount (£7000), allotted to the Alfred Hospital for a new wing.

THE AUSTIN HOSPITAL.

At its meeting on the 5th inst., Dr. M'Crea informed the Committee that, owing to failing health and the many urgent calls on his time, he would be unable to give that attention to the duties of President that he felt the office called for, and he therefore, with very great regret, begged to tender his resignation.

The doctor was pressed to reconsider his decision, it being suggested that possibly leave of absence might have such a beneficial effect on his health that he would still be enabled to retain his seat, or failing that, that he should allow his name to appear as president while another member of the committee would be pleased to perform the duties.

Dr. M'Crea thanked the ladies and gentlemen present for their expression of kindness and goodwill, but stated that there was no immediate prospect of an improvement in his health, and further, he could not think of retaining a position without being able to perform all the duties attached to it. He would be very glad, however, to allow his name to appear on the list as a general member of committee, and if at any time he could in any way assist the committee in its deliberations, he would be very happy to do so.

It was resolved that Dr. M'Crea's resignation as President be received with much regret, but that his name still appear on the list of the general committee.

No cases of illness presenting any suspicious features have developed themselves amongst the passengers who arrived by the *Messageries* steamer "Yarra" which is now quarantined at Sydney. Mr. A. Hopkinson, the patient who was placed in the sanitorium at Williamstown for the purpose of observation, and to receive a course of medical baths, has been discharged.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs for October 1889, shows that the births of 1371 children, viz., 749 boys and 622 girls, were registered during the month. The deaths registered numbered 645, viz., 363 of males and 282 of females. To every 1000 of the population of the district, the proportion of births registered was 3·13, and of deaths registered 1·47. One hundred and twelve deaths, or 17 per cent. of the whole, took place in public institutions. The number of children under one year who died was 184, the total number under five years being 259. Deaths from zymotic diseases fell from 86 in the 30 days of September to 77 in the 31 days of October. Under this head, deaths from scarlet fever fell from 3 to 1, deaths from whooping cough from 22 to 15, and deaths from diphtheria from 37 to 21. On the other hand, deaths from cholera, diarrhoea, and dysentery increased from 8 to 21. Typhoid fever caused 6 deaths in both months. In addition to the deaths from diphtheria referred to in the last column of the table, 5 deaths were set down to diphtheritic croup (classed as a disease of the respiratory system) in the month under review, 7 in September, 8 in August, and 16 in July.

DEATHS FROM TYPHOID FEVER AND DIPHTHERIA, 1887 TO 1889.

MONTHS.	TYPHOID FEVER.			DIPHTHERIA.		
	1887	1888	1889	1887	1888	1889
January	40	39	70	1	5	15
February	70	63	64	4	2	13
March	59	54	91	3	13	18
April	57	43	113	6	13	26
May	40	32	92	10	19	35
June	15	20	36	7	16	30
July	15	12	17	9	14	48
August	9	9	16	7	11	36
September	7	9	6	7	11	37
October	5	10	6	4	9	21
Total	317	291	511	58	113	279

Correspondence.

To the Editors of the Australian Medical Journal.

DEAR SIRS,—As I was unable to be present at the meeting of the Medical Society on November 13th, and to join in the discussion which followed the reading of Dr. Snowball's paper on Diphtheria,

and as none of the members mentioned the precise method of treatment which I am in the habit of adopting, I will ask your permission to state it in the Journal. My results have been so much more favourable than those mentioned, that I feel considerable diffidence in stating them, lest incorrect diagnosis, or at least some exaggeration should be thought to be present; I will therefore confine myself to saying, that I never expect to lose a case of diphtheria, which at the time I first see it is pharyngeal, and has not implicated the larynx, provided I can ensure efficient nursing, and carrying out of instructions. The etiology of the disease is all-important, as the treatment depends entirely upon the view taken; my own opinion is emphatically that expounded by Dr. Jamieson—that it is local in its origin. I believe it to be strongly infectious, but whether it can arise sporadically, I cannot say. Many cases have come under my observation where it appeared almost demonstrated that such was the case, but it is always difficult to make sure of the absence of contagion. The virulent cases mentioned by Dr. Williams, where the constitutional symptoms at once become extreme, have never come under my observation; but I have seen cases, one in particular, in Hamilton years ago in consultation with Dr. Annand and others, where the local conditions existed for several days with little constitutional disturbance, and had the patient been a child, might possibly have been over-looked, and then with almost sudden virulence, general infection took place, and the patient rapidly died.

Some years since, I was in the habit of applying nitrate of silver, either solid or in strong separate solution, and found it very efficacious; but as it is painful, and as the white scar left is liable to be confounded with the diphtheritic membrane, I seldom use it now. Believing the disease to be at first purely local, I trust to local remedies, merely giving a little sulphuric acid as a placebo. The throat is mopped out with moderate firmness with glycerine and tannin. Painting with a brush or feather is not sufficient, as the object is to remove the membrane and leave a sticky surface; much force however is not desirable. The patient is then allowed to spit into a piece of paper which is immediately burned; a small quantity of sulphur powder is at once blown through a tube on to the throat and allowed to stick there, no further spitting nor swallowing being allowed, so that drinks and medicine should be given before the application, and not for a quarter of an hour afterwards. *It is essential that this should be done at least every hour at first, day and night*; where neglected at night, or done less frequently, the case is generally worse in the morning. After

the first day, it may usually be left for two hours at night, and later on for three hours, but it should be done hourly during the day until nearly well.

This is the whole of the treatment so far as the patient is concerned, and if carried out thoroughly, will, I believe, cure in nearly all cases. Sulphur is necessarily swallowed, and may act through the blood, it occasionally relaxes the bowels a little, but unless used in unnecessarily large doses, does not do so to any extent. Where I have reason to believe that systemic poisoning has occurred, I use sulpho-carbolate of soda, but this is a rare occurrence. It is useless to place the sulphur on the tip of the tongue, it must go to the disease and stick there, the part should always have a coating of sulphur on it. Good food, chiefly drinks, and stimulants in moderation should also be ordered. There should of course be isolation and disinfection; in the latter, I include sulphurous acid fumes, obtained by burning sulphur in the room several times a day, but never used strong enough to distress the patient while he is in the room; few patients can bear fumes of sufficient strength to have any great effect upon the disease. The after-disinfection should be thorough. A matter of great importance is that the doctor should disinfect himself, especially taking care to wash his face and *hair*. I have reason to believe infection was once carried by me in this way.

Having twice taken diphtheria from patients years ago, I now always take a pinch of sulphur as snuff, and place some in my mouth before entering the room.

It may be well to mention here a simple expedient for diminishing the pain of swallowing in any case of sore throat, for which I am indebted to a correspondent of the *Lancet*—press the patient's ears firmly with the palms of your hands while he is swallowing. It is possible glycerine and tannin alone might suffice for a cure if applied with the same frequency, but my own opinion is, that the sulphur is the efficient agent; the combination is so successful as to amount to a specific. Probably the mistake usually made is in not applying the remedy with sufficient frequency, so that the membrane which, in my own case, I proved to be sometimes of extremely rapid growth (a quarter of an inch in about an hour), gets the opportunity of increasing.

The time taken for a cure varies in extent and severity from a few to eight or ten days. Usually it quickly ceases to spread, and begins to improve within forty-eight hours, but appreciable change is not always so rapid; so that if any of your readers should decide to give this plan a trial, they should determine to

carry it out to the end, in spite of its appearing at first to be doing little or no good, and also to do it thoroughly. The nurse must be firm and decided, and must not think it more important that the child should sleep, than that the application should be made. Except with very young children, little difficulty occurs after they see that resistance is useless; but (if necessary) force must be used, the round end of a clothes-peg being placed between the teeth, and the application made. Two are generally necessary for this, but a clever nurse will often manage by herself. It is not so distressing as would be supposed, except the first night, when sleep is constantly interrupted.

The advantage of this plan is that, being devoid of pain or danger, it can be applied in any doubtful case, and may thus stamp out at the commencement what would otherwise be an epidemic. I never use any other treatment for pharyngeal cases, and have not given a death certificate for several years, although the disease is tolerably prevalent here. It appears also to prevent such cases from invading the larynx; but where this part is already attacked matters are different, and treatment must differ also. But I have already trespassed sufficiently on your space, and will conclude by saying that I am under the impression I obtained this method of treatment from some source which I cannot now recall, so that originality is not claimed. It differs very little from some of those mentioned at the meeting, and from that of Dr. Williams scarcely at all in principle. The point of importance I believe to be continuous application; probably many agents would suffice, if so used.

I am, dear Sirs, yours faithfully,

Casterton, November 28, 1889.

CHARLES SMITH.

To the Editors of the Australian Medical Journal.

GENTLEMEN,—In your issue of 15th inst., I notice that Dr. Balls-Headley has killed me off; I should like just to contradict him through your next. Thank God, I am alive and well, but not so smart as I was on July 18, 1855.

Ballarat,

November 25, 1889.

Yours truly,

W. P. WHITCOMBE.

[It is possible that the President's speech at the Medical Society dinner was not quite correctly reported. Dr. Robertson informs us that he arrived in Melbourne in 1853, not 1855 as stated, and that he resigned before the advertising member resigned. The reporter (who does not write shorthand, and took his notes chiefly on the backs of menu cards), begs to offer his apologies to Drs. Whitcombe and Robertson.]

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—Stanley Vipan Theed, Mornington, M.R.C.S. Eng. 1890, L. et L. Mid. R.C.P. Edin. 1880; Hubert Payne Scott, Fitzroy, L.S.A. Lond. 1872; Richard Augustus Aloysius Manly, Spottiswoode, M.B. Melb. 1889; Alfred Fleming Joyce, Fitzroy, M.B. Melb. 1889; Albert Otto Bobardt, St. Kilda, M.B. Melb. 1889; John Harry Saunders, Kew, M.B. Melb. 1889; William Isaac Boyes, Parkville, M.B. Melb. 1889; Emil Gutheil, Toorak, M.B. Melb. 1889; George William Damman, St. Kilda Road, M.B. Melb. 1889; Thomas Cherry, Ormond College, M.B. Melb. 1889; Frank Montgomerie Peebles, Geelong, M.B. Melb. 1889; John Raymond Fox, Shepparton, M.B. Melb. 1889; William Jens Gregerson, East St. Kilda, M.B. Melb. 1889; Horatio Percy Martell, Moonee Ponds, M.B. Melb. 1889; James Purves White, Melbourne, M.B. Melb. 1889; Rastamji Dinshaji Ghandy, Melbourne, L.S.A. Lond. 1881, L.F.P.S. Glas. 1882; William Clow Little, Melbourne, M.D. C.M. Queen's Univ. Ontario 1889, M.C.P.S. Ontario 1889, L.R.C.S. Edin. 1889; John Duff, Harrow, M.D. C.M. Queen's Univ. Ontario 1889, M.C.P.S. Ontario 1889, L.R.C.P. et R.C.S. Edin. 1889, L.F.P.S. Glas. 1889, L.M. Edin. 1889; John Ellison, Caulfield, M.D. Royal Univ. Irel. 1883, C.M. Royal Univ. Irel. 1887; Charles Burke Gaffney, Melbourne, L.R.C.S. Irel. 1879, L.K.Q.C.P. Irel. 1881, L.M.K.Q.C.P. Irel. 1881, F.R.C.S. Irel. 1889; James Louis Edgeworth Somers, Ballarat Hospital, L.R.C.S. Irel. 1883, L.A.H. Dub. 1883.

HEALTH OFFICERS. The following appointments have been confirmed:—Borough of Hamilton—Leonard Robinson, M.D., *vice* William Edward Le Fanu Hearn, M.B., resigned; Shire of Numurkah—John M'Ginness, L.R.C.S.I., *vice* Charles Drinkwater, M.R.C.S.E., deceased; Borough of Buninyong—Frank Reginald Longden, L.R.C.S. Ed., resigned; Shire of Minhamite—J. V. C. Denning, L.R.C.S. Irel., *vice* Joseph Ross, M.D., resigned; Shire of Flinders and Kangerong—Stanley V. Theed, M.R.C.S. Eng., *vice* Arthur M. Wilkinson, M.B. Melb., resigned; Borough of Wood's Point—A. J. Hamilton, L.R.C.P. Edin.

PUBLIC VACCINATORS.—The following appointments have been made:—Avoca—Sampson John Rodger Greville, M.R.C.S., *vice* Edward Harkness, L.R.C.P., whose resignation has been accepted; Kersington—Charles Yaldwyn Shuter, M.R.C.S.E., *vice* G. D. Dickinson, M.R.C.S.E., whose resignation has been accepted; Macarthur—John Vere Charles Denning, L.R.C.S., *vice* Joseph Ross, M.D., whose resignation has been accepted; Frankston—Alfred Hobart Sturdee, M.R.C.S.E., *vice* G. P. Atkins, L.R.C.P., whose resignation has been accepted; Wood's Point—Alfred James Hamilton, L.R.C.P.

VICTORIAN MILITARY FORCES.—The following appointments have been made:—Mounted Rifles—Edward Graham Ochiltree, M.D., to be a surgeon, on probation, with the relative rank of captain; the Honourable Surgeon James George Beaney, M.D., to be surgeon-major. Victorian Rangers—Surgeon-Major Gerald Henry Fetherston, M.D., from the unattached list, medical staff of militia, to be surgeon-major; Surgeon John Charles Crozier Durham, from the fixed establishment to the unattached list; Surgeon Herbert Augustus Embling, M.B., from the unattached list to the fixed establishment, *vice* Surgeon J. C. C. Durham.

An important letter has been received from Dr. Germont, one of the representatives of M. Pasteur, who recently visited Australia, by Mr. Arthur A. Devlin, of Junee, who took a prominent part in the experiments conducted a few months ago with M. Pasteur's specific for anthrax. Dr. Germont says that he has obtained from M. Pasteur authority to negotiate with the Australian colonies for the sale of the virus for anthrax. They propose to sell the monopoly and free use of the virus to the United Australian colonies for £38,000, or to New South Wales alone for £28,000, these figures being in distinct contrast with the £100,000 mentioned by M. Pasteur after the experi-

ments at Juneë had demonstrated the efficacy of the virus. Drs. Germont and Loir are prepared to come to Australia again to establish laboratories, and make the other necessary arrangements, but only on condition that their expenses are guaranteed.

At the meeting of the Central Board of Health on the 15th ult., the president stated that for the last fortnight the number of cases of diphtheria in the colony was 53, and the deaths 24, and that there were 41 cases of typhoid, and 5 deaths. Of the metropolitan municipalities, Footscray headed the list both with the number of cases and the number of deaths. The president reported as to the steps which had been taken in connection with the small-pox cases on the steamer "Yarra," and spoke of the conduct of the health officer, Mr. E. G. Figg, as having been unsatisfactory. Mr. Figg appeared before the Board, and defended himself by stating that he firmly believed the passenger (Mr. Hopkinson), who has since been isolated, to be suffering from chicken-pox, and under the circumstances, he did not deem it necessary to detain the vessel and prevent the passengers from landing at Melbourne. The Board will reserve their decision as to the conduct of Mr. Figg until next meeting.

Arrangements are now being made by Mr. Akehurst, the President of the Central Board of Health, under direction from the Chief Secretary, for bringing the new Health Bill into operation at as early a date as possible. The date fixed in the Act is January 1, or such earlier date as may be decided upon by the Governor in Council. The election of the Board will be the first step taken. The chairman is to be nominated by the Government, and there is no doubt that the appointment will be conferred upon Mr. Akehurst, the President of the present Board. The medical inspector is also to be nominated by the Government. The selection in England some months ago of Mr. Creswell for the position was notified by cable message in *The Argus*. The appointment could not be permanently made at that date, as the Bill had not then passed. It has now, however, been confirmed. The remaining members of the Board will be elected by the municipalities. One will represent the city of Melbourne, one the suburbs north of the Yarra, and another the suburbs south of the Yarra. The country shires will elect two members, and the country cities, towns, and boroughs two, which will make the number of the Board nine. It is desired that no unnecessary delay shall take place in bringing the new order of things into existence, and as soon as the arrangements can be completed, the municipalities will be called upon to elect their representatives.

BIRTHS.

DAVENPORT.—On the 6th inst., at High-street, St. Kilda, the wife of Dr. A. F. Davenport—a daughter.

O'BRIEN.—On the 15th ult., at Sunbury, the wife of Dr. J. L. O'Brien, of a daughter.

SALMON.—On the 22nd ult., at Ballarat East, the wife of R. H. Salmon, M.B. et Ch. B.—a son.

MARRIAGES.

HUGHSTON—SMITH.—On the 29th ult., at the Presbyterian Church, East Brisbane, by the father of the bride, assisted by the Rev. D. F. Mitchell, Park Church, Robert Wilson Hughston, M.B., B.S., eldest son of Johnstone Hughston, of Camberwell, Melbourne, to Grace Mary, eldest daughter of the Rev. A. C. Smith, East Brisbane.

IRONMONGER—HIGGINS.—On the 5th inst., at Trinity Church, Port Melbourne, by the Rev. W. A. Brooke, M.A., Charles William, son of Thos. Ironmonger, Esq., J.P., Wolverhampton, England, to Catherine Emma, younger daughter of Edmund T. Higgins, Esq., M.R.C.S.L., F.R.G.S., East Melbourne.

POULTON—TEASDEL.—On the 17th October, at St. Matthew's Church, Murrumbidgee, by the Rev. W. A. Swan, Benjamin Poulton, M.D., M.R.C.S., of North Terrace, Adelaide, to Lettice Cordelia, only daughter of Frederic Teasdel, of Murrumbidgee, S.A.

DEATHS.

BROWNLESS.—On the 14th ult., at 3 Burlington Terrace, Albert-street, Melbourne, Anne Jane, the beloved wife of Anthony Colling Brownless.

COWARD.—On the 24th ult., at his residence, Twyford, Germananton, N.S.W., Henry Coward, M.D., aged 71 years.

DYRING.—On the 20th ult., Dulce Naomi, only child of Carl and Helen Dyring, aged 11 months.

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